

# Flipped Learning: Misunderstandings and the Truth<sup>1</sup>

Ozan FİLİZ<sup>2</sup> & Adile Ařkım KURT<sup>3</sup>

## ABSTRACT

Flipped learning is a learning approach that enables the transfer and internalization of information into an implementation within an interactive learning environment, where the students receive the information individually or in groups. The teacher acts as a guide, unlike traditional learning environments, where this is implemented with a crowded group. Although the flipped learning approach is increasingly being applied quite extensively, it has also been the cause of certain misunderstandings. This study aims to theoretically define the flipped learning approach and to present its positive and negative aspects. A review of the literature reveals several misconceptions such as: flipped learning decreases the teachers' class responsibilities due to the online content; only involves showing course video materials to the students; has to be implemented for the whole class; is only applicable for certain courses; teachers have to create their own videos; and content should be only in video format. It is therefore important for teachers who plan to implement this instructional approach to be aware of its positive aspects and potential negative misunderstandings should be understood in order to be avoided.

*Key Words:* Flipped classrooms, Flipped learning, Misunderstandings and the truth

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<sup>2</sup> Res. Asst. – Anadolu University Education Faculty - ozanfiliz@anadolu.edu.tr

<sup>3</sup> Assoc. Prof. Dr. - Anadolu University Education Faculty - aakurt@anadolu.edu.tr

## INTRODUCTION

The rapid developments in technology and the related costs reduction has resulted in a structural change in society. In a social framework surrounded by technology, it is inevitable for the educational environment to be affected by the same. While life goes on during a time of such striking change, it is not possible for the classroom to prepare the students for the real life using traditional approaches (Erişti, 2010). Educational environments should help students to become independent individuals, and to be able to apply what they learned to real life (Caraccio, Wolfsthal, Englander, Ferentz & Martin, 2002). Thus, classrooms should be integrated with developing technologies and should be used efficiently. In addition, students stress that the technological resources provided in classrooms are often insufficient and they expect to utilize more technologies in learning activities today (OECD, 2012). Prensky (2001) named these students as digital natives.

Prensky (2001) stated that our educational system was not designed to educate today's students. He stressed that today's students grew up using technology, spend most of their time with these tools, and have access to totally different processes in order to acquire and process information, compared to previous generations. To raise students, which have different qualifications than the students of previous generations, as members of a qualified workforce, the current educational technologies should be utilized efficiently (Orhan, Kurt, Ozan, Vural & Türkan, 2014).

When the progress in education technologies, the need for a qualified workforce as a requirement of the information society, and the learning preferences of digital natives are considered, the needs for new learning approaches become inevitable. Recently in Turkey, although the education system has been attempted to be restructured based on constructivist theory, there were some problems experienced, such as limitations of time to implement all the suggested activities and lectures according to teachers' guide books, and teachers still apply traditional approaches which cause problems in practice (Ayvacı & Ernas, 2009; Arslan, Organ & Kırbaş, 2010). Flipped learning is an alternative learning approach that could provide solutions to these very problems. Flipped learning provides a different solution to teaching-learning processes, which are realized usually through a one-way communication from the teacher to the student and under the influence of behaviorist theory, as a learning approach that supports the constructivist theory. Since its inception, it has attracted the attention of educationalists and its use has become increasingly widespread. Flipped learning approach, in addition to its increasing popularity, has also caused certain misunderstandings. In the literature, flipped learning studies are concentrated outside of Turkey. Therefore, the aim of this study is to define flipped learning approach theoretically and to bring to light the misunderstandings about it and to contribute to the literature by stating the reality of the current situation.

### **From flipped classrooms to flipped learning**

Initially named as "flipped classrooms," the method was introduced by Woodland High School teachers Jonathan Bergmann and Aaron Sams in 2007, when they recorded PowerPoint presentations with voiceovers for students who missed the class and made them available online. This method was defined by Sams and Bergmann (2012) as simply watching lectures at home that were traditionally done in the classroom, and then completing the homework in the classroom. Verleger and Bishop (2013) defined the flipped classroom method by dividing it into two parts. The first part included the transfer of instruction out of

the classroom using computer-based instruction, while the second part entailed group activities in the classroom to reinforce the treatment of course subjects.

The main purpose of the flipped classroom method is to carry over the time spent for lecturing in the classroom in order to make this time available for in-class activities. Table 1 compares the time spent in a 40 minute long course with traditional activities and activities in a flipped classroom.

Table 1. Comparison of duration of activities in traditional and flipped classrooms (adapted from Sams and Bergmann, 2012)

<i>Traditional Classrooms</i>		<i>Flipped Classrooms</i>	
<i>Activity</i>	<i>Duration</i>	<i>Activity</i>	<i>Duration</i>
Introduction	5 min.	Introduction	5 min.
Revision of homework	10 min.	Questions and answers on course videos	10 min.
Instruction of the new subject	20 min.	In-classroom activities	25 min.
Homework assignments for next class	5 min.		

Table 1 demonstrates that the activity period required for the instruction of the new subject in a traditional classroom was 20 minutes, whilst the time spent for lecturing activities in a flipped classroom increased to 25 minutes since the instruction was completed before the students arrived to the classroom. As the lecture period extends, the period reserved for in-class activities as well as the instruction period increases accordingly.

The fact that teachers in different countries conceive and implement the flipped classroom system using different methods presents the need to highlight and emphasize the method as a learning approach. In this respect, flipped classrooms are discussed as a flipped learning approach and it has been stressed that different methods could be used by the teacher within the context of this learning approach (Flipped Learning Network [FLN], 2014).

### **Flipped Learning**

Flipped learning is a learning approach enabling the transfer and internalization of information into an implementation within an interactive learning environment, where the students receive the information individually or in group. The teacher acts as a guide, unlike traditional learning environments, where this is implemented with a crowded group (FLN, 2014). Sams and Bergmann (2014) suggested that flipped learning basically contains individual learning. Similarly, flipped learning provides a more individualized learning for the students, as opposed to linear and plain instruction (Butt, 2014). Thoms (2013) stated that in the flipped classroom method, the emphasis was on the teachers' implementation of the method, whereas in flipped learning, the emphasis is on the learning process the students experience in order to master the subject matter. Bornmann (2014) emphasized the importance of the learning levels of students, as opposed to the physical production and distribution of instructional videos.

FLN (2014) argued that many teachers have flipped their courses, but this process alone was insufficient to be considered as flipped learning. FLN (2014) claimed that flipped learning has four separate pillars, and for teachers to accomplish flipped learning, they have to reshape their implementations to the framework of these four pillars. As shown in Table 2, these pillars are flexible environment, learning culture, intentional content and professional educator.

Table 2. *Four pillars required enabling flipped learning (FLN, 2014)*

Flexible Environment	It contains the possibility of different teachers implementing different methods or techniques. Flipped learning makes it possible for students to learn anywhere and whenever they would like to learn.
Learning Culture	It expresses the active status of students in flipped learning, who are passive in traditional method and their interactive participation in structuring information.
Intentional Content	It entails teachers considering what information students should attain whilst learning. The content should be targeted for a purpose and should allocate more time for active learning activities and be student-centered.
Professional Educator	This individual is defined as someone that improves themselves using self-regulation in the teaching-learning process, provides a healthy learning environment and immediate feedback to students on course videos and activities.

Chen, Wang, Kishuk and Chen (2014) stated that the model proposed by FLN covers secondary education and has not been used extensively in higher education, and that there were insufficient studies covering higher education. By adding three more pillars to the FLN model, its applicability for higher education can now be discussed. As can be seen in Table 3, these additional pillars are progressive activities, engaging learning experiences and diversified platforms.

Table 3. *Three pillars added to the model proposed by FLN (Chen et al., 2014)*

Progressive Activities	Individual instruction, group discussions, lab studies are social interaction activities that could be achieved both in school and/or outside of school, resulting in the student becoming a planner, problem solver and an active participator.
Engaging Learning Experiences	The instructional design could be good, but if the educator does not take students' experiences into consideration, negative results could be achieved for students of the flipped learning process.
Diversified Platforms	It contains individualized, differentiated, personalized design of platforms in flipped learning. These diversified platforms provide a seamless learning experience that expresses the integration of student experiences with formal and informal learning environment and context.

Table 3 demonstrates Chen et al.'s (2014) more comprehensive model with seven pillars aimed to implement flipped learning approach effectively in higher education environments. Based on the findings on the feasibility of this model, Chen et al. (2014), argued that the model was efficient and student satisfaction was high. During their

interviews, students stated that they would prefer flipped approach classes instead of the traditional approach. Thus, a framework of flipped learning covering all levels of education is provided.

It has been observed that the limited number of studies about flipped learning and its widespread utilization only amongst educators has introduced certain misunderstandings about flipped learning. It is therefore considered important for teachers who plan to implement flipped learning to be aware of its positive aspects and potential negative misunderstandings should also be understood in order to be avoided.

### **Misunderstandings concerning flipped learning and the truths**

The following are misunderstandings concerning the flipped learning approach:

- It decreases the responsibilities of the class teacher due to the online content;
- There is a requirement that teachers create their own videos;
- It improves the success of teachers;
- It decreases student-teacher interaction;
- Learning is achieved only through viewing course videos;
- There is no control over the students watching the videos or not;
- Students could structure the information inaccurately;
- It should cover the whole academic year;
- It could only be applied to certain courses;
- Content should be only in video format;
- Implementation of flipped learning approach has only one model;
- The most current technologies should be used for flipped learning;
- It is no different than online courses.

It is considered that the reasons for these misunderstandings should be revealed and the truth explained in order to increase understanding about the flipped learning approach. The misunderstandings observed are briefly explained below

#### **Decreasing the responsibilities of the teacher in the classroom due to online content**

There are misunderstandings about the role of the teacher in flipped learning. One of the most significant is the perception of a possible decrease in responsibilities of the teacher, due to the advance preparation and sharing of course content. In flipped learning, the more important principle is to transfer theoretical content out of the classroom and to enable in-depth learning through the design of various in-class activities. Thus, the teacher should carry out a role whereby they can effectively design in-class activities and manage their time better in addition to the instruction of theoretical content (Fulton, 2012). For flipped learning to be effective, the teacher should take on more responsibility compared to the traditional approach (McLaughlin et al., 2013). Thus, it has been suggested that teachers working in the same field should engage in teamwork in flipped learning approach (Largent, 2013).

#### **The requirement that teachers should create their own videos**

Another misunderstanding about flipped learning is the requirement that teachers should create the videos on their own. Sams and Bergmann (2012) stated that it was valuable for the students to see and to hear their own teachers and to read their teachers' own handwriting, but they also argued that videos prepared by other teachers could be used as

well. When the proficiency of each teacher is considered, in terms of creating his/her own content, it is deemed important to also use content provided by other teachers.

### **Flipped learning results in being a better teacher**

Where teacher competency is concerned, Sams and Bergmann (2012) argued that the profession of teaching is so much more than that of a content developer and distributor. Thus, a teacher claiming s/he is implementing flipped learning approach and is therefore a good teacher just because s/he is preparing the course videos and conveying them to students is considered to be false interpretation. According to FLN (2014) propositions, a professional educator who could accomplish flipped learning is an individual who can improve through self-regulation, and create a healthy learning environment and provide immediate feedback to students on course videos and activities. Instead of considering that flipped learning resulting in better teachers, it would be more appropriate to consider a good teacher to be an essential factor in the provision of effective flipped learning.

### **Minimizing student-teacher interaction**

Another misunderstanding in flipped learning, caused by the transfer of responsibility for learning the course material from teachers to students, is the perception of minimized student-teacher interaction. Flipped learning is considered as an approach that transfers the responsibility of learning from the teacher to the student (Bennett et al., 2012). With the transfer of theoretical instruction in traditional approach, where interaction is minimal, it would be expected that during the time reserved for in-class activities, communication and interaction between the teacher and students, as well as between students themselves, should increase (Sams and Bergmann, 2012).

### **Learning is achieved only through the viewing of course videos**

Due to the wide use of videos in flipped learning, and its popularity especially at the Khan Academy, the focus seems to be solely on videos. Although videos are highly significant in flipped learning, they are not sufficient on their own to demonstrate effective flipped learning. Videos can be accepted as a starting point for the realization of in-depth learning in the process of flipped learning (Sams and Bergmann, 2014). The most important point is to realize team-based interactive activities in order to provide meaning and to achieve the internalization of course content.

### **There is no control over students watching the videos**

Although the control of the students' following-up the theoretical content via the videos is not possible and has been considered a limitation of flipped learning (Jenkins, 2012), it is better expressed as a misunderstanding. Lately, as course content is increasingly provided in video format, new video tracking systems have developed. Advanced web-based video platforms provide information on students' watching the video, when they have stopped watching the video, how many times each student has watched the video and the technology can even stop playing the video where a student moves away from the tab displaying the video. By adding open-ended and multiple-choice questions to videos, the technology could prevent students from moving on unless they successfully respond to questions to confirm their comprehension of the subject matter. Sams and Bergmann (2012) asked their students to take notes while watching the videos and by checking these notes later on, they could control the viewership and the learning of the course content.

Developing technologies as well as creative solutions could enable video viewership to be better controlled.

### **Students could structure the information inaccurately**

It has been considered a limitation that students could structure information inaccurately as a result of not being able to learn the information and their lack of comprehension during the process of flipped learning (Gençer, Gürbulak and Adıgüzel, 2014). When the students are left alone to view course videos, it is natural for them to structure the information inaccurately. One of the responsibilities of the teacher in flipped learning is to control the students' structuring of the information. Structuring the information inaccurately could be prevented by adding questions to videos with voice messages and written notes.

### **Coverage of the whole academic year**

Flipped learning is a flexible approach that could be implemented from one course subject to another, or from a single unit to a semester plan, or from a semester plan to a whole academic year. When Morris and Thomasson (2013) decided to structure their English course, they stated that they restricted their use of the flipped learning approach to the fields of spelling and grammar. In this respect, it could be stated that teachers should not feel an obligation to implement flipped learning to cover the whole academic year.

### **Applicable only for certain courses**

There are misunderstandings concerning flipped learning being only applicable for science or social science courses. Bretzmann's (2013) book specified practical strategies for flipped learning, included courses on different fields of study, including English, history, social studies, mathematics and science studies. The book shared the experiences of teachers who structured their classes around the flipped learning approach.

### **Course content could only be shared in video format**

Videos are an important element of the flipped learning process (Bergmann and Sams, 2012), however videos are not the only requirement in the implementation of this learning approach. When Bretzmann (2013) structured a social studies course based on flipped learning, he asked the students to read a book instead of watching videos and instructed them to come to class prepared with their reading notes. Thus, books, animations, cartoons and sound files could be used in flipped learning in addition to videos.

### **There is a single model for implementing flipped learning**

Flipped learning is an approach where different models can be utilized by different teachers (FLN, 2014). While Sams and Bergmann (2012) preferred to use a "flipped classroom based on full learning" model in their flipped learning approach, Chen et al. (2014) used the "flipped holistic classrooms" model. In the model known as 'flipped classroom based on full learning', Sams and Bergmann (2012) designed their classrooms parallel to the principles of Bloom's full learning theory and according to the flipped learning approach. On the other hand, the 'flipped holistic classrooms' model covers the use of all learning environments such as synchronous, asynchronous, home, mobile and physical classrooms as a whole and in a coherent way (Chen et al., 2014). Since flipped learning is a flexible approach, each teacher can develop and use their own model as appropriate.

### **Current technologies should be used for flipped learning**

One misunderstanding about flipped learning is that it requires use of the latest technologies. Sams and Bergmann (2014) stated that flipped learning could be realized with limited technological means. The misleading perception that latest technologies should be used in flipped learning also brings up the issue of digital divide. Digital divide is described as a social discrimination between schools that provide advanced technologies to students and those that provide lesser technological means (Valadez & Duran, 2007). In flipped learning environments, where the course content could not be shared on the Internet using video, depending on the means of the school, it could be provided using media projector, distributed as sound files or tapes, solving the problems created by the digital divide (Keengwe, Onchwari & Oigara, 2014).

### **It is no different from online courses**

As Massive Open Online Courses (MOOCs) became popular, the use of videos as an educational tool also became significant. And since the courses are recorded and shared using video in flipped learning as well, this has caused a misconception that flipped learning was no different from online instruction. While MOOCs provide completely online instruction, flipped learning approach provides meaning and internalization of learning via in-class activities. In this context, MOOCs could be used to support flipped learning (Herreid & Schiller, 2013).

## **RESULT, DISCUSSION AND SUGGESTIONS**

Although educational programs were structured in the framework of constructivist theory, there are certain problems in their implementation. In their study, Ayvaci and Ernas (2009) recounted individual teacher views on the necessity of teacher guides designed in the constructivist framework for science and technology classes. In their study, 95% of participant teachers stated that they could not implement the guidebooks completely. Their reason was an insufficient time proposed to treat the subjects and activities. In a separate study, Arslan, Organ and Kırbaç (2010) attempted to determine administrator views on the implementation of the constructivist theory. The findings of that study demonstrated that school administration thought that the constructivist theory was only partly implemented in Turkish courses. Treatment of the courses in traditional approach, despite the acceptance of constructivist theory, created problems in their implementation. Flipped learning is considered to be a learning approach that could resolve these problems.

Although flipped learning initially came about as a method known as flipped classroom, as it has been utilized by different teachers using different methods, today it has been determined that it should be conceived as a learning approach. In this approach, responsibility of theoretical instruction is transferred to the student and team-based interactive activities are implemented during classroom time. A review of the literature uncovered little existing research on the efficiency of flipped learning in Turkey.

When studies on the effectiveness of flipped learning are scrutinized, Niagara High math teachers, Ventry and Kilmer, compared scores obtained from a class treated under traditional method with another under the flipped learning approach. According to their findings, the percentage of students passing in the traditional class of 2012 was 35%, while that increased up to 55% in 2013 after the flipped approach was introduced (Western New



York Regional Information Center, 2013). Similarly, in a study by Roshan and Roshan (2012), while 58% of the students in math class attained grades between four and five out of five, after the introduction of education based on flipped learning, this rate jumped to 78% and none of the students scored below three. An action research by Clark (2013) compared the performance points of middle school students received in traditional and flipped learning classes. In the study, there was no significant difference found between the two approaches based on the performance points, although the students stated more positive views for the flipped learning approach.

In a study on the efficiency of flipped learning approach at the University of North Carolina, students from two basic pharmaceuticals classes in 2011, in the Department of Pharmaceutics, were compared; with one class under the traditional approach and the other with the flipped learning approach. Findings showed that average final scores increased from 160.06 to 165.48 points over 200, favoring the flipped learning approach (McLaughlin et al., 2014).

Although the number of studies on the efficiency of flipped learning approach is limited in the literature, it could be stated that flipped learning generally provides better results than from the traditional approach. These findings increase the popularity and usage of flipped learning approach by an increasing number of teachers. Since there have been limited studies in Turkey about flipped learning approach and the general worldwide increase in its implementation, this has resulted in several misunderstandings about the approach. These misunderstandings could be summarized as; it decreases the responsibilities of the class teacher due to the online content, the requirement that teachers create their own videos, it improves the success of teachers, it decreases student-teacher interaction, learning is achieved only through viewing course videos, there is no control over students watching the videos or not, students could structure the information inaccurately, it should cover the whole academic year, it could only be applied to certain courses, content should be only in video format, the implementation of flipped learning approach has only one model, the most current technologies should be used for flipped learning, and it is no different than courses online. It is considered especially important for teachers in Turkey who wish to design their courses based on this approach that these misunderstandings are cleared up. However, further studies are needed to evaluate the applicability and efficiency of this approach in Turkish schools. Within the context of Movement of Enhancing Opportunities and Improving Technology (FATİH), interactive whiteboards and tablets were distributed to schools, but it has been observed that tablets were not used by teachers for various reasons. One of the reasons stated was the lack of appropriate course content (Kurt, Kuzu, Dursun, Güllüođınar and Gültekin, 2013). To increase the utilization of the tablets distributed under the FATİH project, the flipped learning approach could be implemented. It could be stated that this approach would enable teachers to design their course content within their own school culture. Thus, by installing course content in tablets, the students would arrive at class ready for the instruction. In addition, the FATİH project could be effective in implementing flipped learning across all provinces and regions of Turkey. This project could help reduce the digital divide. In this respect, studies on the FATİH project in relation with the flipped learning approach could provide a new angle for the literature.

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## **Ters-yüz Öğrenme: Yanlış Anlaşılmalar ve Doğruları<sup>4</sup>**

Ozan FİLİZ<sup>5</sup> & Adile Aşkım KURT<sup>6</sup>

### **Giriş**

Teknolojinin hızla gelişmesi ve maliyetinin ucuzlaması sonucu toplum yapısı değişimlere uğramaya başlamıştır. Teknolojiyle çevrelenmiş bir toplum yapısında, eğitim ortamlarının da bu değişimlerden etkilenmesi kaçınılmazdır. Yaşam böylesine çarpıcı bir değişim içindeyken sınıfların geleneksel anlayışla öğrencileri gerçek hayata hazırlaması mümkün olamamaktadır (Erişti, 2010). Eğitim ortamları öğrencileri bağımsız ve öğrendiğini gerçek hayata uyarlayabilen bireyler olmasını sağlamalıdır (Carraccio, Wolfsthal, Englander, Ferentz & Martin, 2002). Bu nedenle sınıflarımızın da gelişen teknolojilerle bütünleşmesi ve etkili bir şekilde kullanılması gerekmektedir. Buna ek olarak, bugünün öğrencileri, sınıflarda sunulan teknolojik olanakların yetersiz olduğunu ve daha fazla teknolojiyi öğrenme etkinliklerinde kullanmayı bekledikleri vurgulanmaktadır (OECD, 2012). Bu öğrencileri, Prensky (2001), dijital yerliler olarak adlandırmaktadır.

Prensky (2001), eğitim sistemimizin bugünün öğrencilerini eğitmek için tasarlanmadığını belirtmektedir. Öğrencilerin teknoloji ile büyüdüğünü ve zamanlarını bu araçlarla geçirdiklerini ve önceki kuşaklara göre bilgiyi alma ve işleme süreçlerinin tamamen farklı olduğunu vurgulamaktadır. Önceki kuşaklara göre farklı özelliklere sahip öğrencileri, bugünün bilgi toplumunun gerekliliği olan nitelikli insan gücüne sahip bireyler olarak yetiştirilebilmesi için eğitim teknolojilerinin etkili bir şekilde kullanılması gerekmektedir (Orhan, Kurt, Ozan, Vural & Türkan, 2014).

Son yıllarda ülkemizde, eğitim sistemimiz yapılandırmacı kuram temelinde tasarlanmaya çalışılsa da, sıkıntılar çıktığı görülmektedir (Arslan, Organ & Kırbas, 2010; Ayvaci & Ernas, 2009). Ters – yüz öğrenme, bu sıkıntılara çözüm getirebilecek nitelikte bir öğrenme yaklaşımı olarak karşımıza çıkmaktadır. Ortaya çıkışından bu yana eğitimcilerin dikkatini çekmiş ve kullanımı giderek yaygınlaşmıştır. Ters-yüz öğrenme yaklaşımı, giderek yaygınlaşmasının yanında bir takım yanlış anlaşılımları da beraberinde getirmektedir. Alanyazında ters – yüz öğrenmeye dayalı çalışmaların, Türkiye dışında yoğunlaştığı görülmektedir. Bu doğrultuda çalışmanın amacı, ters-yüz öğrenme yaklaşımını kuramsal olarak tanıtmak, hakkındaki yanlış anlaşılımları ortaya koyarak doğrularıyla birlikte alanyazına kazandırmaktır.

### **Ters – yüz Sınıflardan Ters – yüz Öğrenmeye Geçiş**

Ters-yüz sınıflar yöntemi, Sams ve Bergmann (2012) tarafından basitçe, geleneksel olarak sınıfta yapılanın evde yapılması ve eve verilen ödevlerin ise sınıfta tamamlanması şeklinde tanımlanmıştır. Ters – yüz sınıflar yöntemindeki temel amaç, ders anlatımıyla geçen sürenin sınıf dışına taşınarak sınıf içi etkinliklere daha fazla zaman ayrılmasını

<sup>4</sup> Bu çalışma, 8. Uluslararası Bilgisayar ve Öğretim Teknolojileri Sempozyumunda sözlü bildiri olarak sunulmuştur. 18-20 Eylül 2014, Edirne, Türkiye.

<sup>5</sup> Arş. Gör. - Anadolu Üniversitesi, Eğitim Fakültesi, Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü, Eskişehir - ozanfiliz@anadolu.edu.tr

<sup>6</sup> Doç. Dr. - Anadolu Üniversitesi, Eğitim Fakültesi, Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü, Eskişehir - aakurt@anadolu.edu.tr

sağlamaktır. Ters – yüz sınıfların, farklı ülkelerdeki öğretmenler tarafından farklı yöntemlerle kullanılmaya başlanması ve yaygınlaşması, bu yöntemin bir öğrenme yaklaşımı olarak ele alınması gerekliliğini ortaya çıkarmaktadır. Bu nedenle ters – yüz sınıflar, ters – yüz öğrenme yaklaşımı olarak ele alınmakta ve bu öğrenme yaklaşımı altında farklı yöntemlerin öğretmenler tarafından kullanılabilmesi vurgulanmaktadır (Flipped Learning Network (FLN), 2014).

### **Ters-yüz Öğrenme**

Ters-yüz öğrenme, geleneksel öğrenme ortamlarında, kalabalık bir gruba yönelik gerçekleştirilen bilgi aktarımının bireysel öğrenme alanına taşınması ve öğrencilerin kuramsal bilgiyi bireysel veya grup halinde, öğretmenin rehber konumunda yer aldığı dinamik, etkileşimli öğrenme ortamlarında uygulamaya dönüştürmesi ve içselleştirmesine olarak tanımlanan bir öğrenme yaklaşımı olarak ele alınmaktadır (FLN, 2014). Bergmann (2014), ters – yüz öğrenmenin temelde bireysel öğrenmeyi barındırdığını belirtmektedir. FLN (2014), birçok öğretmenin derslerini ters – yüz ettiği ancak ters – yüz öğrenme için bu işlemin yetersiz kaldığını belirtmektedir. FLN (2014), ters – yüz öğrenenin dört farklı yapısının olduğunu ve öğretmenlerin ters – yüz öğrenme gerçekleştirebilmeleri için uygulamalarını, bu dört yapı kapsamında şekillendirmeleri gerektiğini belirtmektedir. Bu yapılar esnek öğrenme ortamı, öğrenme kültürü, amaçlı içerik ve profesyonel eğitimidir. Chen, Wang, Kinshuk ve Chen (2014), FLN tarafından ortaya koyulan modelin lisans öncesi dönemi kapsadığı ve yükseköğretim bağlamında yeterince kullanılmadığını, keşfedilmeyi beklediğini ve yükseköğretim kapsamındaki çalışmaların yetersiz olduğunu belirtmektedir. Bu doğrultuda, FLN tarafından ortaya konulan modele üç yapı daha ekleyerek yükseköğretimde kullanılabilirliği tartışılmaktadır. Eklenen üç yapı ise ilerlemeci etkinlikler, öğrencinin öğrenme deneyimi ve çeşitlendirilmiş platformlardır.

### **Ters – yüz Öğrenmeye Yönelik Yanlış Anlaşılmalar ve Doğruları**

Ters – yüz öğrenme yaklaşımında öğretmenin rolüne ilişkin yanlış anlaşılımlar bulunmaktadır. Bunların başında, *öğretmenin ders içeriklerini oluşturup öğrencilerle paylaşması sonucu ders sorumluluğunun azalması* gelmektedir. Ters – yüz öğrenme yaklaşımında asıl önemli olan, kuramsal içeriğin sınıf dışına taşınmasıyla sınıf içinde daha çeşitli etkinliklerin tasarlanarak derinlemesine öğrenmenin gerçekleştirilmesini sağlamaktır. Bu nedenle öğretmenin, kuramsal içeriğin sunumunun yanında, sınıf içi etkinlikleri iyi tasarlayan ve buna göre zamanını iyi yönetebilen bir role sahip olması gerekmektedir (Fulton, 2012). Özellikle ters – yüz öğrenmenin sağlıklı gerçekleştirilebilmesi için öğretmenin sorumluluğu, geleneksel yaklaşıma göre daha fazla olmaktadır (McLaughlin vd., 2013)

Ters – yüz öğrenme yaklaşımında bir diğer yanlış anlaşılma ise *videoların öğretmenler tarafından oluşturulması* gerektiğidir. Sams ve Bergmann'e (2012) göre, öğrencilerin ders videolarında kendi öğretmenlerini görmesinin, sesini duymasının, öğretmenin el yazısını okumasının değerli olduğunu belirtmelerinin yanında başka öğretmenler tarafından hazırlanan videoların kullanılabilmesini de ifade etmektedirler.

*Ters – yüz öğrenmenin iyi bir öğretmen olmayı sağlaması*, yanlış anlaşılımlardan bir diğeridir. Sams ve Bergmann (2012), öğretmen yeterlilikleri göz önünde bulundurulduğunda, öğretme işinin iyi bir içerik tasarımcısı ve dağıtıcısından daha farklı

olduğunu söylemektedir. Bu nedenle, öğretmenlerin ders videolarını hazırlayıp öğrencilere ulaştırması sonucu ters – yüz öğrenme yaklaşımını uyguluyorum ve iyi bir öğretmenim demesi yanlış bir yorum olarak algılanmaktadır.

Ters – yüz öğrenme sürecinde, öğretmenlerin ders içeriklerinin öğrenilmesi sorumluluğunu öğrenciye vermesinden doğan bir yanlış anlaşılma da *öğrenci – öğretmen etkileşiminin azalması* olarak yorumlanmaktadır. Ters-yüz öğrenme, öğrenme sorumluluğunu ve sahipliğini öğretmenden öğrenciye transfer eden bir yaklaşım olarak değerlendirilmektedir (Bennett vd., 2012). Özellikle kuramsal bilginin sınıf dışına taşınması sürecinde ve sınıf içinde artan zamanda yapılan etkinlikler ile öğrenci-öğretmen etkileşiminin artması beklenmektedir (Sams & Bergmann, 2012).

Ters – yüz öğrenme sürecinde videoların kullanılması ve son yıllarda Khan Akademi başta olmak üzere videolu eğitimin yaygınlaşması, odak noktanın sadece videolar üzerine yoğunlaşmasını neden olmuştur. Bu durumda *ters – yüz öğrenmenin öğrencilerin sadece ders videolarını izlemeleri yoluyla gerçekleştiği* yönünde bir yanlış anlaşılmaya neden olmaktadır.

Diğer bir yanlış anlaşılma ise *öğrencilerin ders videolarını izleyip izlemediğinin kontrol edilememesidir*. Gelişen web tabanlı video platformları sayesinde öğrencilerin videoyu izleyip izlemediği, kaçınıcı dakikada video izlemeyi bıraktığı, videoyu kaç kere izlediği görülebilirken tarayıcıda farklı bir sekme açıldığında videonun oynatılmasını durdurmakta sağlanabilmektedir. Videolara açık uçlu ve çoktan seçmeli sorular eklenerek bu sorulara cevap vermeden videonun ilerlememesi sağlanarak, öğrencinin konuyu kavrayıp kavrayamadığı değerlendirilmeye alınabilmektedir.

Ters – yüz öğrenme sürecinde *öğrencilerin bilgiyi yanlış öğrenmeleri ve öğrenmelerinin anlaşılabilmesi* üzerine yanlış yapılandırabileceği bir sınırlılık olarak gösterilmektedir (Gençer, Gürbulak & Adıgüzel, 2014). Ters – yüz öğrenme sürecinde öğretmenin sorumluluklarından biri de öğrencilerin bilgiyi yapılandırma süreçlerinin kontrol edilmesidir. Ders videolarına eklenen sorularla, ses notlarıyla, yazılı notlarla bilginin yanlış yapılandırılmasının önüne geçilebilir.

Ters – yüz öğrenme yaklaşımının uygulanmasının *tüm öğretim yılını kapsamaması gerektiği* bir diğer yanlış anlaşılımdır. Ters – yüz öğrenme bir ders konusundan bir üniteye, bir üniteden bir dönemlik plana, bir dönemlik plandan yıllık plana kadar uygulanabilir esnek bir yaklaşımdır.

Ters – yüz öğrenme yaklaşımının *sadece fen bilimleri derslerine veya sadece sosyal bilimlere yönelik derslere uygulanabilirliği* konusunda yanlış anlaşılımlar bulunmaktadır. Bretzmann (2013) ters – yüz öğrenmeye yönelik pratik stratejiler isimli kitabında farklı alanlara yönelik derslere yer vermektedir.

*Ders içeriklerinin sadece video formatında paylaşılması gerektiği* yanlış anlaşılımlardan birisidir. Ters – yüz öğrenme sürecinde videolar önemli bir yer tutmaktadır (Bergmann & Sams, 2012) ancak bu öğrenme yaklaşımının kullanılması için video tek şart değildir. Bu doğrultuda, ters – yüz öğrenme sürecinde videoların kullanılmasının yanında kitaplar, animasyonlar, karikatürler ve ses dosyaları da kullanılmaktadır.

Ters – yüz öğrenme konusundaki diğer bir yanlış anlaşılma ise *bu yaklaşımın uygulanmasının sadece bir modeli olduğudur*. Ters – yüz öğrenme, farklı modellerin farklı öğretmenler tarafından işe koşulduğu bir yaklaşım olarak tanımlanmaktadır (FLN, 2014).

Ters – yüz öğrenmeye yönelik yanlış anlaşılmalardan biri de *en güncel teknolojilerin kullanılması gerektiği* yönündedir. Sams ve Bergmann (2014), sınırlı teknolojik olanaklarla ters-yüz öğrenmenin gerçekleştirilebileceğini ifade etmektedir.

Kitlesel açık çevrimiçi derslerin (MOOCs) yaygınlaşmasıyla birlikte video ile eğitim önem kazanmıştır. Özellikle ters – yüz öğrenme yaklaşımında da derslerin videoya kaydedilip öğrencilerle paylaşılması *ters – yüz öğrenmenin derslerin çevrimiçi verilmesinden bir farkının olmadığı* yönünde yanlış bir anlaşılmalı doğurmaktadır. MOOCs’lar derslerin tamamen çevrimiçi verilmesini sağlarken ters-yüz öğrenme de yaklaşımında sınıf içinde gerçekleştirilen etkinliklerle öğrenmenin anlamlandırılması ve içselleştirilmesi sağlanmaktadır. Bu doğrultuda MOOCs’lar ters-yüz öğrenme sürecine destek olarak kullanılabilir (Herreid & Schiller, 2013).

### **Sonuç, Tartışma ve Öneriler**

Alanyazında ters – yüz öğrenme yaklaşımının etkililiğine dayalı çalışmalar sınırlı olsa da genel anlamda geleneksel yaklaşıma göre daha başarılı sonuçlar verdiği söylenebilir. Özellikle Türkiye’de ters – yüz öğrenme yaklaşımına yönelik araştırmaların sınırlı olması ve dünyadaki kullanım oranlarının artması, bu yaklaşıma yönelik bir takım yanlış anlaşılmaları da beraberinde getirmektedir. Türkiye’de bu yaklaşıma göre derslerini tasarlayacak öğretmenler için yanlış anlaşılmaların ortadan kaldırılması önemli görülmektedir. Bununla birlikte bu yaklaşımın Türkiye’deki okullarda uygulanabilirliğinin ve etkililiğinin değerlendirilmesi için yeni araştırmaların yapılması gerekmektedir. Fırsatları Artırma ve Teknolojiyi İyileştirme Hareketi Projesi (FATİH) kapsamında okullara etkileşimli tahta, tablet bilgisayarlar dağıtılırken tablet bilgisayarların belirli nedenlerden dolayı öğretmenler tarafından kullanılmadığı görülmektedir. Bu nedenlerden biri olarak yeterli ders içeriklerinin bulunmaması gösterilmiştir (Kurt, Kuzu, Dursun, Güllüpmar & Gültekin, 2013).

FATİH projesiyle verilen tablet bilgisayarların kullanılabilirliğini arttırmak için ters – yüz öğrenme yaklaşımı uygulanabilir. Bu yaklaşımın öğretmenlere ders içeriklerini, kendi okul kültürüne uygun bir şekilde hazırlama fırsatı sağlayacağı söylenebilir. Böylelikle, ders içeriklerinin tablet bilgisayarla yüklenmesiyle öğrencilerin derse hazırlıklı bir şekilde gelmesi de sağlanabilir. Bu doğrultuda FATİH projesine yönelik araştırmaların ters – yüz öğrenme yaklaşımıyla ilişkilendirilerek araştırılmasının alanyazına farklı bir bakış açısı kazandırabileceği söylenebilir.

*Anahtar Sözcükler:* Ters-yüz sınıflar, Ters-yüz öğrenme, Yanlış anlamalar ve gerçekler

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