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A MIXED METHOD STUDY: THE EXAMINATION OF INSTRUCTOR'S SELF-EFFICACY PERCEPTION AND VIEWS IN FLIPPED LEARNING

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ABSTRACT

The aim of this study is to examine the self-efficacy perceptions of lecturers in flipped learning and the opinions of preparatory school lecturers about their self-efficacy in flipped learning. Convergent parallel design, one of the mixed research methods, was employed in the study. The study group consisted of 31 Turkish lecturers who work at the School of Foreign Languages at Çağ University. The quantitative data of the research was obtained through the Flipped Learning Teacher Self-Efficacy Scale. Qualitative data was collected by open-ended questions form developed by the researcher. As a result of the study, it was concluded that the flipped learning self-efficacy perceptions of the preparatory school lecturers were at a high level. In addition, the lecturers stated that their self-efficacy in flipped learning and technology use was at a certain level, but they had to continuously improve.

Keywords: Flipped learning; flipped classroom; self-efficacy; blended learning; foreign language.

ÖĞRETİM GÖREVLİLERİNİN TERS YÜZ ÖĞRENMEDE ÖZ YETERLİK ALGILARI VE GÖRÜŞLERİNİN İNCELENMESİ: BİR KARMA YÖNTEM ÇALIŞMASI

ÖZET

Bu çalışmanın amacı, hazırlık okulu öğretim görevlilerinin ters yüz öğrenme üzerine öz-yeterlik algılarını ve ters yüz öğrenmedeki öz yeterliklerine ilişkin görüşlerini incelemektir. Araştırmada karma araştırma yöntemlerinden yakınsayan paralel desen kullanılmıştır. Çalışma grubu Çağ Üniversitesi Yabancı Diller Yüksekokulu'nda görev yapan 31 Türk öğretim üyesinden oluşmaktadır. Araştırmanın nicel verileri Ters Yüz Öğrenmede Öğretmen Öz-Yeterlik Ölçeği ile elde edilmiştir. Nitel veriler, araştırmacı tarafından geliştirilen açık uçlu soru formu ile toplanmıştır. Araştırma sonucunda hazırlık okulu öğretim elemanlarının ters yüz öğrenme öz-yeterlik algılarının yüksek düzeyde olduğu sonucuna varılmıştır. Ayrıca öğretim görevlileri

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kendi görüşlerinde, ters yüz öğrenme ve teknoloji kullanımındaki öz yeterliklerinin belirli bir düzeyde olduğunu ancak sürekli geliştirmeleri gerektiğini belirtmişlerdir.

Anahtar Kelimeler: Ters yüz öğrenme; ters yüz edilmiş sınıf; öz yeterlik; harmanlanmış öğrenme; yabancı dil.

INTRODUCTION

In the developing modern world, the effect of technology has begun to feel undeniable in every field. With the development of 5G technology and the industry 5.0 revolution, this effect is expected to increase even more. This effect, which is not limited to the production and consumption sectors, has now brought innovations in the field of education. In this context, some new methods and techniques such as hybrid, blended, web-based models have emerged. The flipped classroom, which is one of these methods, has been adopted by many educational institutions in the direction of their own programs in the Covid-19 pandemic process and has been actively used. The flipped classroom model generally reverses the traditional teaching process and requires the student to learn from the materials provided by the lecturer in the online environment outside the classroom, and the subject taught by the lecturer in the classroom. In the classroom, it paves the way for the deepening and reinforcement of the learning by discussing the subject and making reinforcing activities. When considered in terms of the revised Bloom's taxonomy, "remembering and understanding", which is one of the lower level learning steps, takes place online before the lesson, while the "application, analysis, evaluation and creation" steps, which are the steps for higher-level learning, are realized during the lesson. With this model, since theoretical knowledge will be given before the lesson, in-class time will also be saved (Cukurbasi & Kiyici, 2017; Miller, 2012; Turan & Goktas, 2015). This will enable more effective and efficient use of interactive time in the classroom and more reinforcing activities and applications during the lesson. The components of the flipped class model are examined below (FLN, 2016):

Flexible Environment: The content prepared by the teachers is shared on the online platform and the student can access the content from anywhere and anytime regardless of the place and time.

Learning Culture: In the model, teachers cease to be the center of knowledge, create learning opportunities for students and adopt a student-centered approach in the classroom environment. Students learn actively by evaluating their own learning and taking part in the structure of knowledge.

Intentional Content: Materials appropriate for the content are created or provided by the teacher according to the individual characteristics, weaknesses and strengths of the students. Besides the didactic materials, teachers organize activities and activities according to the characteristics of the students.

Professional Educator: Professional trainers are more prominent and important in this model than traditional classes. These instructors observe students throughout the lesson, evaluate their work, and give them instant feedback. At the same time, they are in constant communication with students

outside of the classroom. Although the trainers' responsibilities seem to be reduced by the model, they are excessive and open to criticism.

Based on the above information, it is seen that one of the components of the flipped classroom model is Professional Trainer. In this context, educators are expected to improve their technological literacy level with the developing technology, to have knowledge about developing methods, to develop their skills in order to use these methods, and to plan and organize the teaching process. Although at first glance, it seems that the responsibility over the trainer is reduced, the development of the trainer is important in order to use the model effectively and efficiently and the trainer has more responsibility in this model compared to traditional methods. Thus the teacher efficacy on technology and flipped classroom model is vital for proper education.

Teacher efficacy is defined as "the extent to which the teacher believes he or she has the capacity to affect student performance" (Berman et al., 1977, p.137). Modern iterations of teacher efficacy are situated in social cognitive theory, and the construct has been demonstrated to be both context and subject dependent (Dellinger, Bobbett, Olivier, & Ellett, 2008; Tschannen-Moran & Hoy, 2001). Ostensibly similar to Bandura's (1977) theory of self-efficacy, where the focus lies on the outcomes for oneself, teacher efficacy differs in that it measures the belief in the ability to influence the outcomes of others (Hoy, 2000). Both teacher efficacy and self-efficacy are affected by 3 factors: experience, vicarious experience, and social persuasion (Bandura, 1977; Protheroe, 2008).

Although there are studies on the flipped classroom model in the literature, it has been observed that these studies generally examine the effects of the model on academic achievement, attitude, motivation, student and teacher perceptions, and variables such as advantage and disadvantage (Evseeva & Solozhenko, 2015; Lee & Wallace, 2018; Lo & Hew, 2018; Abedi, Namaziandost & Akbari, 2019; Namaziandost & Cakmak, 2020). In this study, lecturer self-efficacy perception and lecturers' views on self-efficacy were examined. However, when the literature was examined, it was seen that there were limited studies to determine and develop the effects of the model on self-efficacy perception. In order to obtain effective results regarding the use of technology in the flipped classroom model, it is important to determine the self-efficacy perceptions of the lecturers as well as the students in order to increase the quality of the teaching process. It is thought that the use of the model will be more effective and easier if the instructors feel competent and safe about using information technologies. Based on this, it is thought that the study will inspire researchers for its contribution to the relevant literature and for further research.

The aim of the research is to examine the opinions of prep school lecturers on self-efficacy perceptions and views on self-efficacy perceptions in flipped learning. From this point of view, the problem sentence of the study was determined as "What is the level of self-efficacy perception of prep

school lecturers in flipped learning?" and "What are the opinions of lecturers on their self-efficacy perceptions in flipped learning?". Thus, the research questions of the study are as follows:

1. What is the level of self-efficacy perception of prep school lecturers in flipped learning?
2. What are the opinions of lecturers on their self-efficacy perceptions in flipped learning?

RESEARCH MODEL

In this study, since both quantitative and qualitative data were collected in order to determine the self-efficacy perceptions and opinions of lecturers in flipped learning, convergent parallel design was employed from mixed research methods. In order to expand the data obtained within the scope of the research, quantitative and qualitative data were collected together; the two data were analyzed independently in the analysis process and were combined and interpreted at the last stage. According to Creswell and Plano Clark (2014), both qualitative and quantitative data are collected simultaneously in this design and both data are included equally. In this study, quantitative and qualitative data were collected together. The qualitative dimension of the study was prepared in a way that supports the dimensions and items of the scale used in collecting quantitative data.

Study Group

This research was conducted in the fall semester of the 2020-2021 academic year with the preparatory school lecturers of a private higher education institution in the Mediterranean region. The study group consist of 31 lecturers. Easily accessible situation sampling was used to determine the sample. Because in this method, the researcher chooses a situation that is close and easy to access (Yildirim & Simsek, 2005).

Data Collection Tools

The measurement tools were used to obtain data from lecturers within the scope of the research are as follows:

1. Flipped Learning Teacher Self-Efficacy Perception Scale to determine the self-efficacy perceptions of lecturers,
2. An Open-Ended Question Form was applied to get the opinions of the lecturers about their self-efficacy in reverse learning.

Flipped Learning Teacher Self-Efficacy Perception Scale

Flipped Learning Teacher Self-Efficacy Perception Scale is used to determine the self-efficacy perceptions of lecturers.

The scale used is the "Flipped Learning Teacher Self-Efficacy Perception Scale" developed by Erensayin, Guler and Erensayin (2019) to determine teachers' perceptions of flipped learning self-efficacy. The validity and reliability study of the scale was conducted by Erensayin (2019). Erensayin, Guler and Erensayin (2019) found that Cronbach's Alpha reliability coefficient was 0.95. According to the study conducted by Erensayin, Guler and Erensayin (2019), the scale was found as 27 items with 4 factors. The scale is a 5-point Likert-type grading scale and includes "absolutely not appropriate (1)",

“not appropriate (2)”, “slightly appropriate, slightly unappropriate (3)”, “appropriate (4)” and “absolutely appropriate (5)”.

As a result of the application of the Flipped Learning Self-Efficacy Scale used in the study in a study group of 31 people, the cronbach alpha value for this application was; The cronbach alpha internal consistency coefficient was determined as 0.950. The fact that the obtained coefficient is above .70 (Alpar, 2014, p. 439), although the number of the study group is small, indicates that the analyzes to be made within the scope of the study will give reliable results. While the lowest score that can be obtained from the scale is 27, the highest score is 135.

Open-Ended Questionnaire

The open-ended question form developed by the researcher was created in order to get the opinions of the lecturers in the study group about their self-efficacy perceptions in flipped learning. While preparing the form, the literature was searched and draft questions were created. Then, expert opinions were taken from two faculty members in the field of education programs and training. Final arrangements have been made in line with the feedback they have given and made ready for use in research. The open-ended question form is one of the data collection tools used to collect qualitative data. It is a technique that is referred to as "open - ended questions" or "open survey ended survey" in the literature and aims to collect written opinions of the participants about the research (Akdag & Coklar, 2009). In order to learn the opinions of the lecturers in the study group on their self-efficacy perceptions in flipped learning, the lecturers answered the open-ended questions form created through Google Forms online. The questions are stated below:

1) What do you think about the place of technology in education?
2) Can you explain your purposes of using technological tools in the learning environment?
3) What criteria do you consider when creating technology-supported learning material? (what do you care about?)
4) Do you consider yourself sufficient in using technology in the flipped learning process? Could you explain with reasons?

Data Analysis

The data collection process in the study was carried out by the researcher on the basis of the voluntary participation of the preparatory school lecturers. While collecting the data, participants were informed of the purpose of the study and made sure that the collected data would be kept anonymous and confidential. Data were collected via Google Forms in December. Descriptive statistics were used to analyze the quantitative data. While interpreting the averages, for the items in the measurement tool; Average values between 1.00-1.79 were “absolutely not appropriate”, average values between 1.80-2.59 were “not appropriate”, average values between 2.60-3.39 were “slightly appropriate, slightly unappropriate”, average values between 3.40-4.19 were “appropriate” and average values between 4.20-5.00 were accepted as “absolutely appropriate”.

The content analysis method was used for the analysis of qualitative data. Content analysis is to bring together similar data within the framework of certain concepts and themes and interpret them in a way that the reader can understand (Yildirim & Simsek, 2005). Content analysis is a scientific approach that allows an objective and systematic examination of verbal, written, and other materials (Tavsancil & Aslan, 2001). Qualitative data analysis is a process in which the researcher organizes the data, divides them into analysis units, synthesizes, reveals patterns, discovers important variables, and decides what information to reflect on the report (Ozdemir, 2010). The content analysis of the data obtained in the research was carried out in three stages. In the first stage, the main categories emerging for the purpose of the research from the answers given to the research question were determined. In the second stage, the data were organized by reading according to the main categories previously determined and sub-categories of the main categories were determined. In the third stage, the data are defined according to the main category and sub-categories, and the information that comes up with the necessary quotations is presented in relation to each other. The data obtained with the form of the open-ended question, in which the lecturers in the study group expressed their opinions about self-efficacy, were arranged and appropriate themes were created by 2 different experts. Then the coding reliability of the data obtained in the study was calculated using Miles and Huberman's formula (Reliability = consensus / (consensus + divergence) * 100). The fact that the coding among the coders is at least 80% indicates that the research results are reliable (Miles & Huberman, 1994; Patton, 2002).

Table 1. Reliability Coefficient Between Encoders

Question Number	Reliability Coefficient Between Encoders
1.	0.80
2.	0.83
3.	0.85
4.	0.80

Since the reliability coefficient of Miles Huberman for the questions in the open-ended questionnaire was above .80 (80%), it was concluded that the consensus among the coders was reliable.

In the abbreviations used in the findings, M for Male, F for Female was used. For example; (F, 5) F means female, 5 is lecturer number.

FINDINGS

Findings Related to First Sub-Problem

What is the level of self-efficacy perceptions of prep school lecturers in flipped learning? Results about the self-efficacy perception levels of prep school lecturers in flipped learning are given in Table 2.

Table 2. Descriptive Results of Self-Efficacy Perception Levels of Prep School Lecturers

	$\bar{X}$	Sd
1 I can prepare activities in which theoretical knowledge can be applied for my course.	4.70	.09
2 I can upload multiple learning materials (video, sound, animation) to the internet that will help students learn the subject outside of the classroom.	4.58	.12
3 I can use the internet safely.	4.48	.14
4 I can prepare accurate/reliable online course materials for students.	4.61	.12
5 I can select accurate/reliable online course materials for students.	4.67	.09
6. I can prepare lecture videos for students to watch the lesson topics before they come to the classroom.	4.19	.19
7. I can use technological tools at a level to prepare lecture videos.	4.03	.19
8. I can prepare active learning activities that students can practice in the classroom.	4.51	.13
9. I can guide students to actively use technological tools.	4.25	.17
10. I can provide the necessary environment for students to benefit from educational platforms (Moodle).	4.51	.13
11. I can provide education that students can actively use computers, internet, online networks, etc.	3.90	.18
12. I can upload the digital learning materials I prepared for my lesson to CD, DVD, Flash Memory, Memory card etc.	4.70	.10
13. I can prepare individual learning materials using computer, printer, scanner and internet technologies.	4.51	.17
14. In the classroom environment, I can prepare activities that support the theoretical knowledge that each student has learned outside of school.	4.64	.10
15. I can understand whether students watch lecture videos at home (outside the classroom) with question and answer practices in the classroom.	4.83	.06
16. I can understand whether students have learned the subject or not with classroom practices.	4.93	.04
17. I can use student-centered learning methods that include in-class interactive activities.	4.74	.07
18. I can give instant feedback to every student in the applications made in the classroom environment.	4.61	.11
19. I can download the files I need from the Internet.	4.83	.08
20. I know what I need to be careful about copyrights on the Internet.	4.12	.17
21. I can prepare course materials using programs such as Word, Excel, Power Point.	4.51	.15
22. I can use interactive whiteboards efficiently in classrooms.	4.09	.19
23 I pay attention to the accuracy/reliability of the information I obtain from the internet.	4.80	.07
24. I can make changes to electronic materials that I download from the Internet.	4.16	.18
25. I can include activities that measure students' prior knowledge in the classroom.	4.58	.11
26. I can identify students' mislearning with different assessment methods.	4.54	.12
27. I can prepare activities that help students correct their mislearning.	4.67	.11
Sum	4.51	.09

The general average score of teachers' self-efficacy perception level in flipped learning was determined as 4.51. This finding can be interpreted as teachers' self-efficacy perceptions in flipped learning are high. The average score corresponds to the "*Absolutely Appropriate*" level in the scale. Moreover, it was seen that teachers mostly displayed the behavior of "*I can understand whether the students learn the subject through classroom practices*.", which is included in I16 ($\bar{X}$ = 4.93), the behavior of "*I can understand whether students watch lecture videos at home (outside the classroom) through question and answer applications in the classroom*.", which is included in I15 ($\bar{X}$= 4.83) and the behavior of "*I can download the files I need from the internet*.", which is included in I19 ($\bar{X}$=4.83). The level of participation with these items corresponds to the level of "*Absolutely Appropriate*" in the scale.

It was also seen that teachers at least displayed the behavior of "*I can provide training that students can actively use computer, internet, online networks, etc.*", which is included in I11 ($\bar{X}$ = 3.90) and the behavior of "*I can use technological tools at a level to prepare lecture videos*.", which is included in I7($\bar{X}$=4.03). The level of participation with these items corresponds to the level of "*Appropriate*" in the scale.

Findings Related to Second Sub-Problem

In the second sub-problem of the study, the themes formed based on the answers they gave to the question "*What do you think about the place of technology in education?*" In order to learn the opinions of the lecturers in the study group about their self-efficacy perceptions in flipped learning are as follows.

Table 3. Lecturers Views on the Place of Technology in Education

Theme: The Place of Technology in Education(N=10)			
Sub-Theme	**Codes**	**f**	**%**
Learning	Should be used permanently	**4**	**16**
	Facilitating access to information	**4**	**16**
	Promoting learning	**3**	**12**
	Facilitating learning	**3**	**12**
	Time saving	**3**	**12**
	Promoting learner needs	**2**	**8**
	Appropriate for individual differences	**2**	**8**
	Appropriate for multiple intelligences	**1**	**4**
	Promoting autonomous learning	**1**	**4**
	Promoting language skills	**1**	**4**
	Promoting 21st century skills	**1**	**4**
	Sum	**25**	**100**
Sub-theme	**Codes**	**f**	**%**
Motivation	Motivating	**3**	**37**
	Promoting professional development	**2**	**25**
	Overcoming prejudice	**1**	**13**
	Learner engagement	**1**	**13**
	Intriguing	**1**	**13**
	Sum	**8**	**100**

When Table 3 is examined, it is seen that the views of the lecturers in the study group about the place of technology in education are gathered around 2 (two) sub-themes which are "*Learning*" (f=25) and "*Motivation*" (f=8).

According to the table, the code with the highest density was "*Should be used permanently*" (f = 4). This is followed by "*Facilitating access to information*" (f = 4) code. Other codes were found as "*promoting learning*" (f = 3) and "*Facilitating learning*" (f = 3), respectively.

The code in which lecturers' views about the place of technology in education was at high level in "*Should be used permanently*" (f = 4). For example;

"*The effect and importance of technology, which is at the center of our lives, on education is inevitable. Its importance for both us teachers and students cannot be denied. We are in the age of technology and many educators started using it because of online education obligation. In my opinion, it shouldn't have been like that. In other words, technology should always be helped, not compulsory.*"(F,3). "*I believe that its place and importance has increased, especially since the transition to internet-based education. Teaching English is already required using technology relatively more than other teaching branches. Since this pandemic period requires the use of internet-based listening / reading / writing activities, I think technology enables education to be more long-lasting and permanent.*"(F,4). "*I think it is an essential element in the future.*"(F,5). "*Technology is like an integral part of education. When there is more progressive teacher or classroom environment, the more technology is used in that classroom. Technology supports, facilitates and enriches education. In addition, it makes it easier to adapt more to the skills of the present (critical thinking, creativity, collaboration and communication) and to develop both the teacher and the student in a good way.*"(F,6).

The instructors also stated that technology "*Facilitates access to information*" (f = 4). For example;

"*Its ability to save time, access resources quickly and effectively, and provide customized / individualized learning/teaching opportunities (if used well) can contribute a lot to education.*"(M,1). "*The best feature for me is that it saves time. In the simplest way, I can create input for students in a shorter time with the help of technology, instead of explaining the subject by writing on the blackboard. Apart from that, both we teachers and students are in the endless world of knowledge. We can access information with a click.*"(F,3). "*As an educator, it contributes to the enrichment of my content (activity, lesson plan, homework, worksheets) by reaching existing resources faster and easier.*"(F,7). "Contributing to my course management in terms of speed and time and accessing as many additional and reliable resources as possible." (F,8).

The themes formed based on the answers they gave to the question "*Can you explain your aims of using technological tools in the learning environment?*" directed to the lecturers are as follows.

Table 4. Lecturers Views on Purposes of Using Technological Tools

Theme: Purposes of Using Technological Tools in Learning Environmen (N=10)			
Sub-theme	**Codes**	**f**	**%**
Teaching-Learning Process	Creating real life situations	**3**	**14**
	Using audio / visual tools	**3**	**14**
	Assessment and evaluation	**2**	**8**
	Giving feedback to the teacher	**2**	**8**
	Promoting game-based learning	**2**	**8**
	Visualizing	**2**	**8**
	Instant feedback	**1**	**4**
	Summing up the topic	**1**	**4**
	Activities to reinforce learning	**1**	**4**
	Concretization the culture of the target language	**1**	**4**
	Preparation for the lesson		
	Example diversity	**1**	**4**
	Out of class learning	**1**	**4**
	Improving the learning and teaching process	**1**	**4**
	Accessing reliable sources	**1**	**4**
	Group works	**1**	**4**
		1	**4**
	Sum	**24**	**100**
Sub-theme	**Codes**	**f**	**%**
Motivation	Drawing attention	**4**	**50**
	Entertainment	**3**	**37**
	Addressing Generation Z	**1**	**13**
	Sum	**8**	**100**

When Table 4 is examined, it is seen that the views of the lecturers in the study group about purposes of using technological tools in learning environment are gathered around 2 (two) sub-themes which are "*Teaching-Learning Process*" (f=24) and "*Motivation*" (f=8).

According to the table, the code with the highest density was "*Drawing attention*" (f = 4). This is followed by "*Creating real life situations*" (f = 3) code. Other codes were found as "*Entertainment*" (f = 3) and "*Using audio/visual tools*" (f = 3), respectively.

The code in which lecturers' views about the purposes of using technological tools in learning environment were concentrated was "*Drawing attention*" (f = 4). For example;

"*Making the lessons interesting is one of my goals.*" (F,1). "*Learning and teaching is a process. Making this process efficient is possible by ensuring that learning takes place under the best conditions. The use of technological tools makes the learning process more enjoyable and more attractive.*" (F,4). "*The first of my goals is to attract students' attention."(F,5). "I use PowerPoint presentations in my lessons as much as I can, both for visualizing purposes and to attract students' attention and summarize the subject.*" (F,7).

The instructors also stated that their purposes of using technological tools to "*Create real life situations*" (f = 3). For example;

"*In foreign language teaching, it is very difficult to transfer materials for the four skills to the classroom environment with classical methods and even the best teacher can hardly achieve this. You can recreate the language as it is used in real life in the classroom only with technological possibilities. In a learning environment whose purpose is limited to language, recreating the language with movies, music and other audio / visual tools seems to be the only way to embody the culture in which the language is spoken to the student.*" (M,1). "*The exercises created before and after the lesson make the learning process relatively more successful as it also connects with daily life.*" (F,4). "*My primary goal is to transfer and adapt materials such as movies, music, pictures, which are generally used for entertainment purposes, into the educational environment. Thanks to the editing tools, I can quickly convert authentic material into learning material. This helps me to demonstrate its real-life use in language learning.*" (M,2).

The themes formed based on the answers they gave to the question "*What criteria do you consider when creating technology-supported learning material? (What do you pay attention to?)*" directed to the lecturers are as follows.

Table 5. Lecturers Views on Criteria for Creating Material

Theme: Criteria considered when creating technology-supported learning material (N=10)			
Sub-theme	**Codes**	**f**	**%**
Instructional	Fitness for purpose	**7**	**23**
	To be clear	**4**	**13**
	Fitness for learner needs	**4**	**13**
	Giving feedback	**2**	**7**
	Giving instant feedback	**2**	**7**
	Ethical rules	**1**	**3**
	Activating the learner	**1**	**3**
	Appropriate for multiple intelligences	**1**	**3**
	Promoting productive activities	**1**	**3**
	Appropriate for different learning styles	**1**	**3**
	Content oriented	**1**	**3**
	Teaching method and technique	**1**	**3**
	Creating context	**1**	**3**
	Deadline	**1**	**3**
	Instructions	**1**	**3**
	Student level	**1**	**3**
	Sum	**30**	**100**
Sub-theme	**Codes**	**f**	**%**
Motivational	To be interesting	**5**	**50**
	To be intriguing	**3**	**30**
	Learner interest	**1**	**10**
	Entertaining	**1**	**10**
	Sum	**10**	**100**
Sub-theme	**Codes**	**f**	**%**
Technical	Reusability	**3**	**30**
	Picture and sound quality	**2**	**20**

Easy to use	**1**	**10**
Material face	**1**	**10**
Not being too long	**1**	**10**
File format	**1**	**10**
Mastery of tool	**1**	**10**
Sum	**10**	**100**

When Table 5 is examined, it is seen that the views of the lecturers in the study group about criteria for technology-supported learning materials are gathered around 3 (three) sub-themes which are "Instructional" (f=30), "Motivational" (f=10) and "Technical" (f=10).

According to the table, the code with the highest consistency was "*Fitness for purpose*" (f = 7). This is followed by "*To be interesting*" (f = 5) code. Other codes were found as "*To be clear*" (f = 4) and "*Fitness for learner needs*" (f = 4), respectively.

The code in which lecturers' views about the criteria considered when creating technology-supported learning material were concentrated was "Fitness for purpose" (f = 7). For example;

"*First of all, it must serve the purpose of my lesson.*"(F,2). "*Even if it is a material prepared in another environment, does it meet the learning and teaching purposes? Is it relevant and sufficient? In other words, does the student achieve the goal I want after using this material?*" (F,3). "*While creating the material, I first evaluate the purpose. I determine for what purpose (grammar / vocabulary learning / speaking activity / reading practice etc.)the material will be used*"(F,4). "*While creating material, the subject of my focus is very important. If I am preparing a speaking activity for that lesson, I will prepare a speaking activity on the targeted topic; Writing activity, I create activities for the implementation of the subject that is aimed to be developed.*"(F,6). "*The important factor for me when creating my materials is that it is suitable for my students' level (language proficiency), language learning aims (goals) and needs.*" (F,7).

The instructors also stated for criteria "*To be interesting*" (f = 5). For example;

"*I want the students to complete the task given with the required method in the context that will attract the students the most.*"(F,4). "*I use tools that I think might be of interest to my students so that the material does not bore the student and leaves a good impression while including them in that activity.*" (F,6).

The themes formed based on the answers they gave to the question "*Do you consider yourself sufficient in using technology in the flipped learning process? Could you explain with the reasons?*" directed to the lecturers are as follows.

Table 6. Lecturers Views on Self-Efficacy

Theme: Self efficacy in technology use and its justifications (N=10)			
Sub-themes	**Codes**	**f**	**%**
Yes	Attended conferences	**3**	**14**
	Attended workshops	**1**	**4.5**
	Received trainings	**1**	**4.5**
	Researches	**1**	**4.5**
	Experience	**1**	**4.5**
	Quick adaptation	**1**	**4.5**
	Openness to new technologies	**1**	**4.5**
	Having a positive attitude	**1**	**4.5**
	Seeing achievement of goals	**1**	**4.5**
	To be able to access to information	**1**	**4.5**
	To be able to guide students	**1**	**4.5**
	Using technology actively	**1**	**4.5**
No	Continuous learning	**3**	**14**
	Technical incompetence	**2**	**9**
	Lack of hardware	**1**	**4.5**
	Lack of institutional support	**1**	**4.5**
	Feeling insecure	**1**	**4.5**
	Sum	**22**	**100**

When Table 6 is examined, it is seen that the views of the lecturers in the study group about self-efficacy in technology use and its justifications are gathered around 2 (two) sub-themes.

According to the table, the code with the highest consistency was "*Attended conferences*" (f = 3). This is followed by "Continuous learning" (f = 3) code and "*Technical incompetence*" (f = 2), respectively.

The code in which lecturers' views about self-efficacy and its justifications were concentrated was "*Attended conferences*" (f = 3). For example;

"*Technology is a very fast and developing phenomenon, in this direction, yes, I consider myself sufficient as long as I can adapt to these developments and changes. The trainings I received, my hands-on experience, the conferences I attended, and being in touch with technology from an early age.*"(F,1). "*The biggest reason I consider myself competent is that I am doing research on this subject and I have received great help from technology during my student years. Examples are the online conferences and workshops I attended.*"(F,7).

The instructors also stated for self-efficacy and its justifications "*Continuous learning*" (f = 3). For example;

"*Yes, I consider myself adequate in terms of encouraging the student to explore individual learning alternatives and presenting examples of them, but ultimately if you consider all the possibilities the internet provides, I think we all need to keep ourselves in a constant learning mood.*"(M,1). "*Although I consider myself competent in using technology for the flipped learning process, I am aware*

that I always have to add more to myself. For this reason, I believe there is more to learn. I think that since technology is not a matter of course, I should constantly update myself on this issue."(F,7).

DISCUSSION and CONCLUSION

The research aimed at examining the self-efficacy levels of lecturers on flipped classroom. As a result of this research, it was concluded that lecturers' self-efficacy levels are at a high level. In addition, the results obtained from the analysis of qualitative data support this finding. According to these findings, it can be said that the self-efficacy perceptions of the instructors are at a high level. Particularly, as expressed in the qualitative findings of the research, the studies of lecturers on professional development may have supported high levels of self-efficacy in the flipped teaching process. In the literature, within the knowledge of the researcher, there is no other study examining the effect of the university-level English preparatory program on the perception of self-efficacy of lecturers in flipped learning. According to the findings, it can be said that the perceptions of flipped learning self-efficacy of lecturers are high in the dimensions of classroom management and material preparation. Moreover, it can be also said that the perceptions of flipped learning self-efficacy of lecturers are at a medium level in technology guidance and lecture video preparation sub-theme. It was observed that the lecturers took into account the students' interests, needs, attention, suitability of the material to the goals of the course and its quality while preparing technology-supported material. Miller (2012) also emphasized that it is very important to design the platform prepared while implementing FC applications according to student and teaching needs, and this situation directly affects the success in the process. Furthermore, Yeşilpınar and Doganay (2018), in their study with university students, stated that student-centered approaches are an important factor in increasing academic achievement, but when choosing a strategy, method and technique for the realization and evaluation of a teaching process in line with the objectives; It is suggested that content, assessment tool and individual characteristics of students should be analyzed. Similarly, the lecturers applying the model organize the teaching process by considering the individual differences of the content and students. Confirmatory findings were also reached by other researchers who investigated the inverted classroom model (Koroglu & Cakır, 2017; Li & Suwanthep, 2017; Roth & Suppasetseree, 2016). On the other hand, it was concluded that the lecturers used digital materials for different purposes. These purposes can be listed as drawing attention, creating real life situations, entertainment, assessment and evaluation, and feedback. This result is in line with Celik, Yıldırım and Yıldırım's (2018) findings. Additionally, considering that the self-efficacy beliefs and attitudes developed by lecturers influence their acts and teaching performances (Li, 1999; Osborne, Simon & Collins, 2003), it can be seen that the flipped classroom model could make positive contributions to the professional achievements of lecturers. As the self-efficacy perceptions of lecturers improve, they are able to practice their activities more confidently, organize what they can do, communicate efficiently and strive to be successful (Benzer, 2011).

Today, lecturers and students spend most of their out-of-school time with technology and learn in an artificial classroom that is free of technology. When they come to school, forcing them to study in an artificial environment, detaches themselves from their realities. That's why technology should be properly integrated into education according to the lecturers' opinions. The blending of developing technologies and teaching methods with these technologies are both interesting for students and create opportunities for them to use the knowledge they have learned in their own lives. With this understanding, there should be a transition from existing traditional methods to learner-centered methods. When choosing a teaching method, students should be perceived as individuals, not as a whole. Since the learning speed and deficiencies of each student will be different, when choosing a teaching method, students should be perceived individually and the method should be arranged according to the student's pace and deficiencies. At this stage, the increasing interest of teachers in the new methods brought by the age with technology and the application of methods that include the human element of technology such as the flipped classroom increases its importance. In the flipped classroom, while the teacher is generally responsible for the lesson planning stage, it is the students who manage the actual process; thus, this increases students' self-confidence. Teachers are recommended to help students develop confidence in language learning, as it enables students to learn and communicate more independently (Cakıcı, 2015).

On the other hand, when we consider student attitude, Kazazoglu (2011) stated that attitude is not an innate characteristic and those negative attitudes can be changed by effective methods that teachers will use in the educational environment. Students' attitude towards the lesson depends on not one but more than one variable. Many factors such as the attitude of the student towards the teacher, the teacher's attitude towards the student, classroom activities, out-of-class tasks, and teaching method can affect the student's attitude. Within the scope of the flipped classroom, the ability of the teacher to give instant feedback to the students and not to overwhelm the students with homework can increase the communication between the teacher and the student by doing the activities in the classroom. The ability of the lecturer to communicate with students instantly through technology can also increase the targeted education quality. Professional educators are in the foreground and important with the flipped classroom compared to traditional classes. These instructors observe students throughout the lesson, evaluate their work, and give them instant feedback. At the same time, they are in constant communication with students outside of the classroom. Although their responsibilities seem to have decreased with this model, they are excessive and open to criticism.

Meanwhile, the variable factors, which contributed to lecturers' self-efficacy, have been always discussed. Usually, all the factors discussed were a cognitive factor of self-efficacy and technology integration (Coknaz & Aktag, 2017). Therefore, for future studies, it is needed to clarify affective factors between self-efficacy and flipped classroom or technology usage. Furthermore, the self-efficacy perceptions of the instructors in the flipped classroom can be examined in terms of various variables.

Based on this research data, the following can be stated for implications for practice;

- School administrations can organize in-service training programs to contribute to teachers' self-efficacy. Teacher reluctance is cited as the main barrier to successful technology implementation (Durrant & Green, 2007). Therefore, a reward and reinforcement system can be established in order to develop a positive attitude in lecturers.
- For in-class applications, lecturers with high self-efficacy, or lecturers experienced in this field (who have previously received this training) can be instructors to train other lecturers. Indirect experiences are the second most powerful source of self-efficacy (Bandura, 1997). When teachers see that their colleagues are successful in applying new technologies in their classrooms, they will begin to gain self-efficacy in their ability to do so. The ability to have a coach who can assist a teacher with any technical problem while applying a new technology will be a motivation to try something new (Tweed, 2013, p. 84).
- Training for different flipped classroom applications can be given for each language skill. Preparatory schools usually have different lessons for each skill. Also, different lecturers take these courses. Therefore, along with a general training, training for skill lessons such as Listening & Speaking and Reading & Writing will also contribute to the more effective course.

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