



The Effect of Peer Assessment on Pre-Service Teachers' Teaching Practices

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Abstract

This study aims at determining the effect of peer assessment technique on pre-service teachers' teaching practices. In this study, "case study" which is one of the qualitative research methods that provide an opportunity to study one side of the problem in the study in details, and in a shorter time was used. The study group of the study consists of pre-service teachers who studied at social studies teaching the program in the 2016-2017 academic year in the Faculty of Education, in Karadeniz Technical University, and the sample of the study consists of 14 pre-service teachers chosen among the final year students. In choosing the sample, homogeneous sampling method which is one of the "purposeful sampling methods" that provide information about the situations thought to have rich information was used. In the study, "semi-structured interview form" and "observation form" were carried out as data collection tools. The data obtained from the observation form were analyzed with "descriptive analysis technique" which is among the qualitative research methods. "Content analysis technique" was used in the analysis of the data obtained from the semi-structured interview form. According to the obtained findings, it was concluded that peer assessment approach has an important role in more qualified pre-service teacher training and in the improvement of the competence on the teaching profession, and peer assessment generally has a positive effect on pre-service teachers. Based on the results of the study, some suggestions were made; an environment in which pre-service teachers can be trained better in terms of professional skill by involving peer assessment in teaching practice can be created, pre-service teachers can be informed well about peer assessment approach by experts, and they can be informed in a detailed way related to the process.

Keywords

Peer Assessment
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Introduction

The era we live in is a period that developments and changes take place regarding information transfer, as it does in other areas. Countries naturally have revised their educational systems to be able to meet qualified human power that emerges from the experienced developments, and they have started changing the quality of the provided training in this direction (Sabancı & Yazıcı, 2017). Based on this understanding, reformations and innovations in the curriculum have been carried out in our country to adapt to the developing world and to meet the needs of society. In the prepared new curriculum instead of behavioral approaches, philosophy of education which pays attention to student experiences, their perspectives, emotions and opinions, which is far from the memorization took place and constructivist approach that would realize this philosophy most effectively and easily was adopted in this process (Akkuş, 2014).

In the programs in which constructivist approach is applied, students play roles who criticize, investigate, solve problems, and try to discover the information, be active in learning and reflect their opinions (Yager, 1995; Cihanoğlu, 2008). On the other hand, in the traditional approach, gaining the given information and being able to repeat them when asked are the basic features expected from the students (Shepard, 2000; Delandshere, 2002). This essential change of paradigm in education has made it necessary to change the learning outcomes in the curriculum, and the assessment and evaluation methods used in the evaluation of these outcomes (Gipps, 1994; Rowntree, 1987; Shepard, 2000). This necessity has led to the development of alternative measurement and assessment methods which have gained importance all over the world in recent years (Assessment Reform Group (ARG), 2002; Gipps, 1994; Glover & Thomas, 1999; Ross, Hannay & Hogaboam-Gray, 2000; Stiggins, 2000; Yurdabakan & Olğun 2011; Wiggins, 1998).

In literature, supplementary assessment and evaluation methods are defined as the methods, which are chosen from the relevant topics and which base on the performance (Newmann, 1997; Palm, 2008; Wiggins, 1993). By this feature, supplementary assessment methods defined as the all the methods except the tests consists of multiple choice or true-false questions that require choice among the given alternatives (Libman, 2010) Performance assignments, portfolios, self-assessment and group assessment, can be stated among these methods (Anderson, 1998; Ayas, 2016; Baki, 2008; Ataman & Kabapınar, 2012). Using these methods with traditional assessment methods has another contribution to enriching teaching environment in various perspectives (Dündar, 2016).

Peer assessment with supplementary assessment and evaluation methods is another innovation that takes place in a teaching environment, and it becomes one of the factors that enrich these environments. Peer assessment is an assessment method, which enables students' works to be interpreted by their peers, and the quality of these works are determined (Temizkan, 2009; Alıcı, 2008; Çepni, 2008; Falchikov, 2001; Majdoddin, 2010). Peer assessment is an important tool regarding students' making an independent decision about their own and their peers' works and developing their ability to express an opinion (Temizkan, 2009). This method can be preferred in crowded teaching environments in which it is not possible for students to have feedback frequently and in which it is not possible especially for teachers to give individual feedback (Dündar, 2016).

The stages of the application of the peer assessment process can be listed as below (Moskal, 2003, as cited in Olgun, 2011):

1. Determining the goals of the assessment
2. Determining the assessment assignments
3. Determining the scoring criteria
4. Managing and applying the assessment
5. Assessing
6. Calculating and interpreting the scores
7. Giving feedback

The peer assessment process has two important factors as peer grading and peer feedback (Lu & Law, 2011). During the peer grading, in order to ensure the effectiveness of the assessment process students are provided with the criteria or rubric that they will use in assessment, and they are asked to grade their peers by following these criteria. In the feedback which is the other factor of this assessment process, students are expected to state their opinions which include constructive feedback and suggestions that will contribute to their development, related to their peers' works (Liu & Carless, 2006; Meek, Blakemore, & Marks, 2017). Some researchers claim that in peer assessment only feedback should be provided, grading should not be done since it may have a negative effect on learning process (Black, Harrison, Lee, Marshall, & Wiliam, 2003; Sadler & Good, 2006; Søndergaard & Mulder, 2012; Snowball & Mostert, 2013; Topping, 2009).

There are a lot of studies which proves the positive effect of peer assessment on students' learning and development (Efe, 2014; Falchikov, 2001; Gümüşok, 2014; Güner, 2012; Çınar, 2014; Uysal, 2008; Özan, 2008; Bozkurt & Demir, 2012; Koç, 2011; Reinders & Lazaro, 2007; Le Hebel et al., 2018; Vickerman, 2009). Falchikov (2001) indicates that peer assessment improves students' learning level and quality and this result especially stems from peer assessment. Thanks to the feedback given in this process, evaluators are provided with the opportunity of understanding how objective criteria and good performance should be, the opportunity of reviewing their own performance, in other words self-assessment, as well as giving the assessed students the opportunity of correcting their own learning (Boud, 1995; Boud, Cohen, & Sampson, 2001; DüNDAR, 2016). Therefore, while students are assessing their peers' works, they can have the opportunity of thinking about their works (Boud, 1995). In the studies that were carried out, it is pointed out that peer assessment enables them to plan their learning, determine their own weak and strong points, have upper cognitive skills, think reflective and develop their problem solving abilities, in addition to its contribution to students to increase students' relations with each other (Tseng & Tsai, 2007; Sluijsmans, Dochy, & Moerkerke, 1999; Nicol & Macfarlane-Dick, 2006).

Studies indicate that peer assessment has also positive effects on pre-service teachers' developing their teaching skills (Al-Barakat & Al-Hassan, 2009; Biri, 2014; Gielen, Peeters, Dochy, Onghena, & Struyven, 2010; Hinett & Weeden, 2000; Koç, 2011; Sluijsmans & Prins, 2006). As a result of the study that they carried out in Jordan with pre-service teachers, Al-Barakat and Al-Hassan (2009) stated that peer assessment contributes to pre-service teachers' development in self-assessment skills as well as their teaching skills. In the study that was carried out by Biri (2014), it is stated that pre-service teachers were asked to observe and evaluate their peers' teaching within the scope of teaching practice lesson during one term in the study. It was also established that peer assessment contributes to their teaching profession and skills as well as to their development in critical, reflective, creative thinking, self-confidence, motivation and communicative skills. When the studies related to peer assessment in teacher training in literature were investigated, it was found out that there are not enough studies on social studies area. In this study, the effects of peer assessment that pre-service social studies teachers did during their teaching practices on the development of their professional skills were investigated within the scope of teaching practice lesson.

The Purpose of The Study

In this study, it is aimed to reveal the experiences of the students included in the peer evaluation process in the teaching practice course. The main aim of this study is to investigate the extent to which pre-service social studies teachers' feedback on each other and their subject matter knowledge, field education knowledge, planning, teaching process and evaluation, classroom management and communication affect the development of competencies. For this purpose, the findings obtained from the pre-service teachers are examined under six headings.

Method

Design of the Study

In this research, a case study, which is one of the research methods that make it possible to investigate one aspect of the problem in details and in a short time was used. By using a case study, the questions How?, Why? What? were trying to be answered and it was aimed to examine the cases thoroughly. In this research method, more than one data collection tools such as interview, observation, etc. are used. This fact enables us to look from a broad perspective and provide alternative interpretations (Yıldırım & Şimşek 2013, p. 321; Çepni 2004, p. 36).

Study Group

The study group of the study consisted of 14 pre-service teachers who were selected from senior students in social studies teaching department in the 2016-2017 academic year at Fatih Faculty of Education, Karadeniz Technical University. In choosing the sample, homogeneous sampling method which is one of the "purposeful sampling methods" that provide information about the situations thought to have rich information was used. The reason for using homogeneous sampling method is to define a significant subgroup by creating a small, homogeneous sample (Yıldırım & Şimşek 2013, p. 135,137).

Development of the Data Collection Tools

In the study, as a data collection tool "semi-structured interview form" and "observation form" were used. Semi-structured interview form was administered because it enables source individuals to reveal their interest, opinion, attitude and behavior, and it provides detailed information about a topic (Balci, 2015; Yıldırım & Şimşek, 2013). The reason for involving observation form is that it provides an opportunity to describe a behavior developed in any environment in details, comprehensively, and spread over time (Yıldırım & Şimşek, 2013). While the interview form was being prepared, firstly, the literature was reviewed, and the studies related to the effect of peer assessment method on pre-service teachers' teaching practices were determined. Based on the determined studies, a draft interview form was developed. To increase the validity of the form, three academicians who are experts in their fields were asked for opinions. In accordance with the provided feedback, interview form was finalized. "General Evaluation Form of In-Class Observation of Pre-service Teacher Teaching Practice" which was designed by MNE (Ministry of National Education) was used as the observation form.

Data Collection and Data Analysis

Observation form and semi-structured interview form were used to gather data in the study. Pre-service social studies teachers evaluated each other with "observation form" during the teaching practices. The data obtained by observation form were analyzed with "descriptive analysis technique" which is one of the qualitative research methods. Descriptive analysis is to summarise and interpret the obtained data according to the predetermined themes (Çepni, 2004). Pre-service teachers' opinions about peer assessment method were obtained with "semi-structured interview form". "Content analysis technique" was used in the analysis of the data obtained from the semi-structured interview form. Content analysis is an analysis type, which is used to analyze the content of a written text or document and reveal them as numerically, and statistically (Ekiz, 2009). The researcher coded the data obtained from the research, and each pre-service teacher who participated in the observation form was coded as A, B, C..., and each pre-service teacher was given codes as PT1, PT2, PT3...and the research data were supported with direct quotations. The obtained analysis results were examined by field experts. In such practices, one of the ways of establishing reliability is to broach the obtained data to experts and take their opinions (Ekiz, 2009).

Results

The findings obtained about the effect of peer assessment technique on the pre-service social studies teachers' teaching practices are presented in this part. In this direction, the data obtained from the pre-service teachers were analyzed under six categories.

The Effect of Peer Assessment on Content Knowledge

Firstly, the effect of peer assessment technique on pre-service teachers' status on content knowledge in teaching practice was tried to be investigated. The data obtained from the pre-service teachers are presented in Table 1.

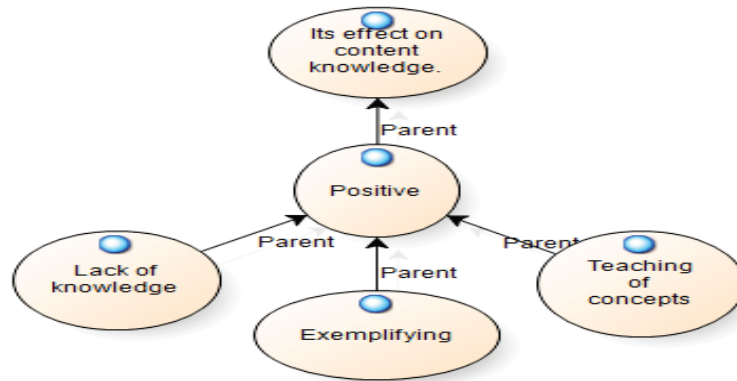
Table 1. The Effect of Peer Assessment on Content Knowledge

Content knowledge	1st week			2st week			3st week			4st week			5st week			6st week		
	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained
Knowing the basic concepts of the content	I	C,D	AB	B	C,D	AE		K	A,B		D	A,B		CD	A,B		A	B,C
		H,G	EK		H,G	KN		H	C,E		N	C,J,K		F	H,E		D	H,E
		F,J			F,I			F	G,I			L		I	G,F			G,F
		L,M			J,L			J	K,L			M			I,J,K			I,J,K
Being able to associate basic principle and concepts in the content consequentially																		
		B,C	AD		D,K	AB		B,C	A		C	A,B		B	A,H		C	A,B
		H,E	KM		H,E	CF		D,H	F		D	H,E		C	E,I,J		D	H,E
		G,F			G,I	KN		E,G	I		M	G,F		D	K,L		F	G,I
Being able to use verbal and visual language that content needs		I,J,L			J,L			J,L	K		N	I,J		G	M,N			J,K,L
		N			M			M	N			K,L		F				MN
		A,B	CD		B,H	AC		A,B	I		A,B	H		A	B,C		D	A,B
		H,E	FK		E,G	DF		C,D	K		C,D	I		D	H,G			C,H
Being able to associate the subject with the other subjects of the field		G,I			I,J,L	KN		H,E	L		E,G	J		E	F,J			E,G
		J,L			M			G,F	N		F,M	K		I	K,L			F,I,J
		M,N						J,M				L			M,N			K,L
												N						M,N
Being able to associate the subject with the other subjects of the field	BC	A,D	K	B	A,C	KM	J	A,B	I	DK	A	B	BD	A		AD	B,CE	
	G	H		G	D,H	N		C,D	K		C	H	G	C		H	,G,F,I	
	F	E		J	E,F			H,E	N		E	G	I	H			J,K,L	
	I	J			I,L			G,F			F	I	J	E			MN	
Being able to associate the subject with the other subjects of the field	M	L						L,M			M	J	K	F				
		N									N	L	M	N				

In Table 1, it is seen that pre-service teachers did peer assessment by observing each other for six weeks via observation form. As a result of the peer assessments that were done, it was determined that while 10 of the pre-service teachers who had a deficiency and were at an acceptable level have become well-trained, 4 of them haven't had any difference regarding knowing basic concepts of the subject. In terms of being able to associate concepts and principles consequentially in the subject, it was concluded that 10 of the pre-service teachers who had deficiencies and were at an acceptable level have become well trained, but 4 of them haven't had any difference. About being able to use verbal and visual language that is necessary for the subject, it was established that 12 of them who had a deficiency and were at an acceptable level, have become well-trained, 1 of them have had a decrease in performance, and 1 of them haven't had any difference. Regarding being able to associate the subject to other subjects of the area, it was determined that 10 of them who had a deficiency and were at an acceptable level,

have become well trained, 2 of them have had a decrease in performance, and 2 of them have had no difference.

Besides, pre-service teachers were asked how peer assessment affected content knowledge. The opinions obtained from pre-service teachers about the subject are presented in Model 1.



Model 1. The Effect of Peer Assessment on Content Knowledge

The preservice teachers evaluated the effect of peer assessment on subject field knowledge. Seven of the preservice teachers stated that they started to care more about learning the concepts of the subject, 5 of them stated that they considered the importance of giving examples for the purpose of concretizing the content, and 2 of them emphasized that it was effective in seeing the deficiencies in the subject field knowledge. While PST2, who emphasized to the importance of learning the concepts of subject field stated that *“I observed the difficulties experienced in the teaching of concepts in this process. For this reason, it was useful to be more careful in preparing the lesson considering the questions that the students could ask.”*; PST12 stated that *“I observed that the concretization of the content increased the interest in the lesson. Therefore, it had an effect on giving more examples while I was lecturing.”* PST1 also stated that *“I realized how I made lack information in my lesson when my friends showed the notes at the end of the lesson. I thought I had delivered lesson best, but it was not...”*

The Effect of Peer Assessment on Pedagogical Content Knowledge

Secondly, in teaching practice of peer assessment, its effect on pre-service teachers’ pedagogical content knowledge was tried to be investigated. The data obtained from the pre-service teachers are presented in Table 2.

Table 2. The Effect of Peer Assessment on Pedagogical Content Knowledge

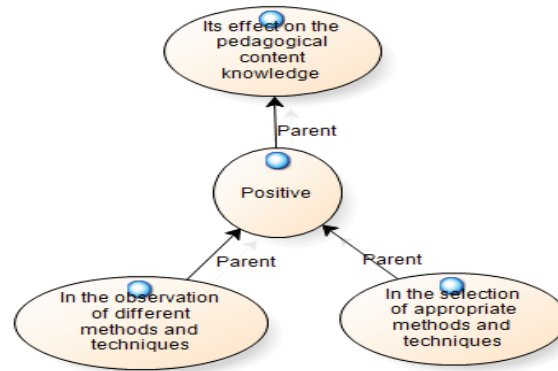
	1st week			2st week			3st week			4st week			5st week			6st week		
Pedagogical content knowl	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained
Knowing the special teaching approach, method and techniques	L	D,JE, AB	AB	D,E	A,B	AB	C,D	A,B	AB	A,B	C,EF	EF	AC	B,D	BD	AC	B,N	BN
		KE, C	C	F,G	C,H	CH	F,H	E,G	EG	D,K	,GH,	GH	FK	E,F	EF	E	D,F	DF
		MG,		J,K	I,M	IM	J,K	I,N	IN	M,N	J	J		G,H			G,HI	GI
		NH,I		L	N	N	L,M				L,I			I,J,L			J,KL	JKL
														M,N			,M	,M

Table 2. Continued

Pedagogical content knowl	1st week			2st week			3st week			4st week			5st week			6st week		
	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Acceptable	Well trained
Being able to benefit from teaching technologies	L	A,B C,DF ,G H	E I J KM N	A,D K,L	B,C E,F G,H I,J M,N		A,B J,ML	C,D E,F , G,H I,KN		C,D K,M	A,B E,F G,H J,L N,I		C F I N L,M	A,B D,E G,H J,K M		F	A,B C,D E,G H,I,J K,M N	
Knowing incorrect concepts that developed in students	BC L	E,KF ,MG HIJ	AD N	BC L	D,K H,G I	A,E F,M N	CJK	B,E F,G L	A,D H,I M,N		B,C D,EF ,G J,K M,N	A,H I,L	CD E I J KM	A,B F,G H,L N		B C D J KM N	A,EF ,G H,L I N	
Being able to provide suitable and sufficient responses for student responses	FG	A M B,C N,D E,H I,L	J K	B,C E,F G,HI ,J L	A,D K,M N		C,EF ,G J,K N	A,B D,HI ,LM, N		A,B E,F	C,D G,H I,J,K L,M N		I,J C,D E,F G,H K,L M,N	A,B C,D E,F G,H I J K,L M,N		AB E H I J K,L M,N	C,D F,G H,I J,KL MN	
Being able to ensure the security in a learning environment	L	D M E,FG ,HIJ, K	AB C	C,KL ,DE, FG, HIJ	A,B M		C,D F,G J,K L,M	A,B E,H I		C,D J,M	A,B E,F G,H I,KN		A J D,EF ,GH, KL, M N,I	B,C D,EF G,H I J K,L M N		C J K I L,M N	A,B D,EF ,GH, I L,M N	

According to the information presented in Table 2, related to knowing special teaching approach, method and techniques, as a result of peer assessment, 10 of them who had deficiency and were at an acceptable level, have become well-trained, 3 of them have had a decrease in performance, and 1 of them have had no difference. Regarding being able to benefit from the teaching Technologies, it was concluded that 9 of the pre-service teachers who had a deficiency and were at an acceptable level have become well-trained, 4 of them haven't had any difference, and 1 of them have had a decrease in performance. Regarding knowing incorrect concepts that developed in students, it was determined that 6 of them who had a deficiency and were at an acceptable level, have become well-trained, 7 of them have had no difference, and 1 of them have had a decrease in performance. In terms of being able to provide suitable and sufficient responses for student responses, it was found out that 10 of them who had a deficiency and were at an acceptable level, have become well-trained, and 4 of them haven't had any difference. About being able to ensure the security of the learning environment, 8 of the pre-service teachers who had a deficiency and were at an acceptable level, have become well-trained, 6 of them have had no difference.

Besides, pre-service teachers were asked about the role of peer assessment approach on pedagogical content knowledge. The opinions obtained from pre-service teachers are presented in Model 2.



Model 2. The Effect of Peer Assessment on Pedagogical Content Knowledge

When Model 2 is analysed, it is seen that 12 of the pre-service teachers stated that peer assessment is efficient in choosing suitable method and techniques, and 3 of them stated that it enables to observe various methods and techniques. PT6 who is one of the pre-service teachers who stated that it is efficient in choosing suitable method and techniques identified that: “Peer assessment made it possible to use activities and methods that are suitable with the lesson in teaching and lesson planning by taking other pre-service teachers’ opinions.” PT2 who is one of the pre-service teachers who stated that peer assessment enables to observe various method and techniques explained that, “I thought that I could use the method and techniques which my friend whom I assessed used. This situation made me see different methods.”

Pre-Service Teachers’ Effect on Planning Skills

Thirdly, it was tried to investigate the effect of peer assessment on pre-service teachers’ planning skills in teaching practice. The data obtained from the pre-service teachers are presented in Table 3.

Table 3. Pre-Service Teachers Affect Planning Skills

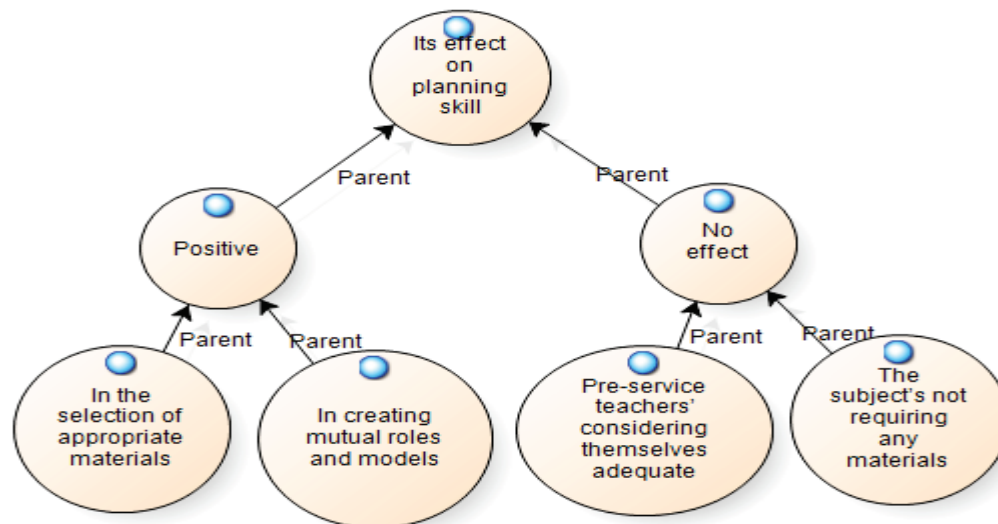
Planning	1st week			2st week			3st week			4st week			5st week			6st week		
	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained
Being able to write plan clearly, understandable and in order	A,B C,G H F K N	DE I J L M	G	A, B D K M F	C,E H I J L N	Well trained	G	C D F H,I J,K L,M N	A,B E,G H,I J,K L,M N	D	A,B C,E F,G H,J,I K,L M,N	Well trained	D	A,B C,E F G,H I, J L,M N,K	Well trained	AB	C,E D I,F K,M N, J	C,E G,H I,F K,M N, J
Being able to identify outcomes and target behaviour clearly	A,C D,E G,F M N	BH I J K L		A B D E J K	C,H G,F I L M N	Well trained	A	C,H G,F D I E L J M K	A B D E J M K	C,H G,F I L M N	B N	A,C D,H E,FG I J,K L,M	Well trained	A D G F L N,K	B,C H,E I, J L,M N,K	Well trained	C D F M,N	A,B E,H, G,I K,L M,N J
Being able to establish method and techniques that are suitable for the target behaviour	A,D H,E G,J L,M N	BC F I K		A,C D,G J L M	B,HE F I,K N	Well trained	A,B	I C,D E,G F J M K	I H I L M N	B KC EG F	A,D H,I J,LM N	Well trained	A D E N	B,C H,G F,I J,KL, M	Well trained	DK	A,B C,E H,G F,I L,M N,J	

Table 3. Continued

Planning	1st week			2st week			3st week			4st week			5st week			6st week		
	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained
Select and prepare appropriate equipment and materials	B	E	AD	ACG	B,D	A	BC	A,D	K	C	DE	A,B	J	G	H,E	J	AC	B,E
	C	M	K	I	H,E	L		H,E	M	J	F	H,G	K	M	F,I		D	F,G
	HG	N	J	H	F,J	N		G,F	N			I,K		B	L,N			H,I
	F,I		L		K,M			I,J				L,M		C	A			K,L
Being able to establish assessment and evaluation methods suitable for the target behaviour								L				N		D				M,N
	B	C,H	AD	B	C	A	BL	C	A	M	AB	C,D		A	C,D		AK	B,C
	J	E,G	K	J	H	D		H	D		H	E		B	H,E		M	D,H
	L	F		L	E	M		E	I		J	G		K	G,F			E,G
Being able to associate the subject with the previous and next lessons																		
Being able to associate the subject with the previous and next lessons	B	A,D	C	J	B,C	A,K	D	C	A,B	B	CD	A,E	D	AB	C,H	A	BC	E,H
	I	H,G	E	L	D,H	M,E	J	H	E,G		HM	G,F		N	E,G		D	G,F
	J	F,N	MN		G,F	N,I		F	I,M		N	I,J			F,I		J	I,M
	L		K		I,K			K	N			K,L			K,L		K	N
	M				M			L						M,J				

According to the data presented in Table 3, as a result of peer assessment, in terms of being able to write lesson plans clearly, understandable and in order, it was determined that 6 pre-service teachers who had deficiency and were at an acceptable level, have become well-trained, 8 of them haven't had any difference. In terms of being able to identify outcomes and target behaviour clearly, it was determined eight pre-service teachers who had a deficiency and were at an acceptable level, have become well trained, and there have not been any difference in 6 pre-service teachers' situation. Concerning being able to determine appropriate methods and techniques, it was concluded that ten pre-service teachers who had a deficiency and were at an acceptable level, have become well-trained, 3 of them have had no difference, and 1 of them have had a decrease in performance. About choosing and preparing appropriate equipment and materials, it was determined that nine pre-service teachers who were at an acceptable level, have become well trained, 3 of them haven't had any difference, and 2 of them have had a decrease in performance. In terms of being able to establish suitable assessment and evaluation methods, it was concluded that nine pre-service teachers who were at an acceptable level have become well trained, and 3 of them have had no difference. It was observed that two pre-service teachers had had a decrease in performance regarding being able to associate the subject with the previous or next lessons.

Apart from observation and assessment, pre-service teachers were also asked about the effect of peer assessment on planning skills. The opinions taken from the pre-service teachers about the subject are presented in Model 3.



Model 3. Pre-service Teachers' Effect on Planning Skills

When Model 3 is evaluated, it is seen that while some of the pre-service teachers emphasised the positive sides of the peer assessment on selection and use of materials in lesson planning process, some of the pre-service teachers stated that peer assessment does not affect material selection and use. 9 of the pre-service teachers who referred the positive sides of the approach, stated that it is suitable for the selection of materials, and 4 of them stated that it is effective in creating mutual role and model. PT13 who is one of the pre-service teachers who pointed out that it is effective in the selection of appropriate material explained that: "It enables us to present the material which we will use in teaching students, and make them evaluate them, and it enables us to provide suitable material for the subject." PT14 who is one of the pre-service teachers who stated that it is effective in creating mutual role and model responded as "When I observed my friends' materials, I saw the deficiencies in mine and I completed them." One of the pre-service teachers who stated that the approach does not affect pointed out that the taught subject does not require any material, and one of them explained that he/she is good enough at in the selection of material and its application so this approach did not contribute to him/her. PR1 who is one of the pre-service teachers who stated that the taught subject does not require any material identified that: "It can be said that peer assessment had an impact on material selection because the subject of the lesson didn't require material. I generally got students to watch videos." PT10 who is among the pre-service teachers who stated that he/she is good at the material selection and practice explained that "I don't think that I have a problem with material selection, it didn't contribute to me." In addition . PST11, one of the pre-service teachers who stated that peer assessment is beneficial explained that: "It can be said that it has a great effect on peer assessment and preparing a lesson plan. I sometimes used existing lesson plans. That helped me to find out my deficiency." PST12, who is among the pre-service teachers who stated that peer assessment enables to observe various methods and techniques, expressed that "Since we are always in touch with friends, it provided us with an opportunity to see our deficiencies and the things that we need to complete." PST1, who is among the pre-service students who stated that peer assessment is useful in using time sufficiently, expressed "Peer assessment provided us with positive effects in terms of lesson planning. In the first lecturing, I wasn't able to use time sufficiently. The reason for that is the block classes conducted in university. During the peer assessment process, I did the planning considering this fact."

Pre-Service Teachers' Effect on The Teaching Process and Evaluation

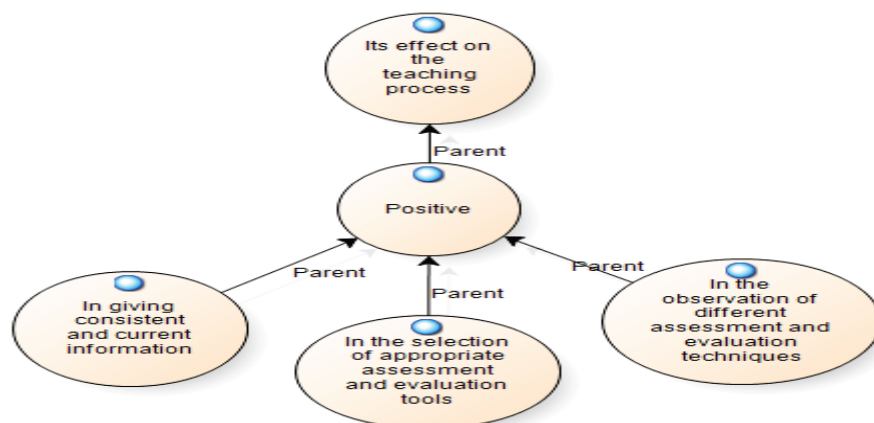
Fourthly, the effect of peer assessment on teaching process in teaching practice of pre-service teachers was tried to be investigated. The data obtained from pre-service teachers are presented in Table 4.

Table 4. Pre-Service Teachers ‘Effect on the Teaching Process and Evaluation

Teaching process	1st week			2st week			3st week			4st week			5st week			6st week		
	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained
Being able to use teaching methods and techniques appropriately	I	B,CH E G,F L,M N	A D J K	G	B, D H, E F, I J, L	A, C K, M N	J	A, D H, E F, J K, L	B, C G, I M, N	K	C, D N	A, B H, G F, I J, K L, M	A	A, C D, F	B, H E, G I, J K, L M, N	K	B D	A, C H, G F, I J, K L, M N
Being able to use the time efficiently	C E I	D, H G, F M, N	A B J K L	E	C, D H, I J K, L M, N	A, B G, F K, L M, N	J	A, C D, H E, I L, M N	B, G F, K L, M N	K	A, B C, H E J, K L, M N	D, G F, I J, K L, M N	A, C D, G F J, K L, M N	B, H E, I J, K L, M N	A	B, C D, E H, G I, J K, L M, N	F D, E H, G I, J K, L M, N	
Being able to ensure active participation in the lesson	I L	A, C D, H E, G M, N	B F J K	I J	C, D H, G L, M K, N	A, B E, F K, N	J	B, C D, H G, F I, K L	A, E M, N	K	A, B H, G F, M L, N	C, D E, I J, K L, N	A, C D, J M F, I K, L N	B, H E, G F, I N	A	B, C D, E H, G F, I J, K L, N	B, C D, E H, G F, I J, K L, N	
Being able to maintain teaching by individual differences	B G F I L M	A, C H, E K, N	D J I L	B G I L	A, H E, F J, K M	C D	J	A, B C, D H, E G, F I, J K, L	M, N	K	A, C D, H E, F M, N	B, G I, J L	B, C D, G J, K M N	A, H E, F I, L N	C	A, B E, H G, F I, J L	A, B E, H G, F I, J L	
Being able to apply equipment and materials regarding the level of class	B I N	A, C H, E G, F M	D J K L	I	A, B H, E G, F J, N	C, D K, L M	J	H, E G, I J, N L, M	A, B C, D F, K L, M	B	E, F M D, H G, I K, L N	A, C D, H G, I K, L N	A	B, C F, M G, I J, K L, N	A, D H, E G, I J, K L, N	M	A, B C, D H, E G, F I, J K, L N	
Summarizing and giving suitable feedback	I M	A, D H, G F, J L, N	B C E K	E	A, D H, G F, I J, K L, M	B, C E, N	J	B, D H, G F, L K, M N	A, C E, I K, M N	B	C, F J, K L, M N	A, H E, G I	A	B, C D, J N L, M	H, E G, F I, K L, M N	A	H, E G, F I, J K, L M, N	
Being able to associate the subject with life	B N	D, H G, F I, J L	A C E K M	B	C, H G, F I, J K, L N	A, D E, M	B	A, C D, H G, F J, K	E, I L, M N	B	C D E, G F, I J, K L, M N	A, H E, G F, I J, K L, M N	D	B, C A, H E, G F, I J, K L, M N	D	B N	A, C H, E G, F I, J K, L M	
Being able to evaluate the level of reaching target behaviour	H E G F I L N	D J K M	A B C	E J L	A, D H, G F, I M, N K	B, C	I	B, D H, E G, F J, K L	A, C M, N	K	A, B H, E K, M N L	C, D G, F I, J L I	H	E, N G F L, M	A, B C, D J, K L, M	A	B, C H, E G, F I, J K, L M, N	

When the findings in Table 4 is evaluated, it is concluded as a result of peer assessment that in terms of being able to use teaching methods and techniques appropriately, 7 pre-service teachers who had deficiency and were at an acceptable level, have become well-trained, 6 of them have had no difference, and 1 has had a decrease in performance. About being able to use the time efficiently, it was revealed that 11 pre-service teachers, who had a deficiency and were at an acceptable level, have become well trained, and the situation of 3 pre-service teachers haven't changed. Regarding being able to ensure active participation into the lesson, it is determined that 7 of them who had a deficiency and were at an acceptable level, have become well-trained, and 6 of them haven't had any difference. About being able to maintain teaching in accordance with individual differences, it was established that nine pre-service teachers who had a deficiency and were at an acceptable level, have become well trained, and 5 of them have had no difference. With regard to being able to apply equipment and materials to the level of the class, it was concluded that nine pre-service teachers who had a deficiency and were at an acceptable level, have become well trained and 5 of them haven't experienced any difference. Regarding summarizing and giving appropriate feedback, 9 of them who had a deficiency and were at an acceptable level, have become well trained and 4 of them have had no difference. In terms of being able to associate the subject with life, 8 of them who had a deficiency and were at an acceptable level, have become well-trained, and 6 of them have had no difference. With regard to being able to evaluate the level of reaching target behaviour, it was concluded that 11 of them who had a deficiency and were at an acceptable level, have become well trained, and 3 of them haven't had any difference.

Pre-service teachers were asked about the effect of peer-assessment on the teaching process and evaluation. The data obtained from pre-service teachers are presented in Model 4.



Model 4. The Effect of Peer-Assessment on the Teaching Process

Based on Model 4, it can be claimed that pre-service teachers think positively about peer-assessment. 11 of the pre-service teachers pointed out that peer-assessment is efficient in the selection of assessment and evaluation tools, 3 of them emphasised that it is efficient in the observation of different assessment and evaluation techniques, and 1 of them stated that it is effective in providing consistent and current information. PT8 who is one of the pre-service teachers who pointed out that it is efficient in the selection of appropriate assessment and evaluation tools explained that, "It enabled me to use assessment and evaluation actively. In addition to it, it enabled me to use more appropriate assessment tools. " The pre-service teacher PT2 who stated that he/she observed various assessment and evaluation tools thanks to peer-assessment, explained that "My friend whom I did peer-assessment, wanted his/her students to do an activity with a similar technique to station technique as an assessment and evaluation method. However, I was preparing worksheets as assessment and evaluation method. By this way, we have learnt what we can do as assessment and evaluation methods from each other". PT1 who stated that peer assessment play a role in providing consistent and current information explained that: "Peer assessment had a positive effect in terms of assessment and evaluation. We tried to pay attention to the consistency and currentness of the information that we taught to students."

The Effect of Peer Assessment on Classroom Management

Fifthly, the effect of peer assessment in teaching practice on the classroom management of pre-service teachers was tried to be revealed. The data obtained from the pre-service teachers are presented in Table 5.

Table 5. The Effect of Peer Assessment on Classroom Management

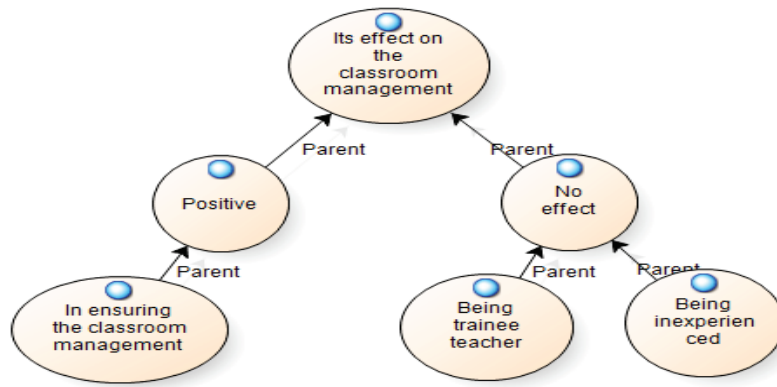
Classroom management	1st week			2st week			3st week			4st week			5st week			6st week			
	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	
At the beginning of the lesson	Being able to start the lesson appropriately	G	A,B	B	C	A,D	J	C	A,B		D	A,B		C	A,B		C	A,B	
		I	C,D	J	G	H,E		D	H,E		J	C,H		D	H,E		D	H,E	
		J	H,E		I	F		K	G,F			E,G		J	G,F			G,F	
		L	F,K		L	M			I,L			F,I			I,K			I,J	
		N	M			N			M,N			K,L			L,M			K,L	
						K						M,N			N			M,N	
Being able to draw attention to the lesson	B	C,H	A	J	A	C,D	J	A	D,H		C	A,B		A	B,C		A	B,C	
		G,I	D		B	E,G		B	E,G		D	H,E		G	D			D,H	
		J	E		H	F		C	F,I		I	G,F		F	H			E,G	
		L	F		I	J		K	M,N		J	L,M		J	E			F,I	
		M	K		L	K		L			K			K	L			J,K	
		N				M					N				M			L,M	
During the lesson	Being able to ensure a democratic learning environment	G	C,H	A		A,C	B		H	A,B		A	B,C		A	B,C		D	A,B
			E	B		D,H	F		E	C,D		E	D,H		G	D,H		J	C,H
			I	D		E,G	J		G	F,I		M	G,F		I	E		M	E,G
			L	F		I	K		L	J,K			I,J		J	F			F,I
			M	J		L	N			M,N			K,L		M	K			K,L
			N	K		M							N		N	L			N
Being able to keep interest and motivation in the lesson	I	A,C	B	J	B,C	A	J	H,E	A		A,B	i	i	A,D	B		A,B	D,E	
	L	D,H	F	L	D,H	F		G,F	B		C,D	J		H,G	C		C,H	F	
	M	E	K	M	E,G	K		I,K	C		H,E	L		F,I	K		G,I	K	
	N	G			I			L,M	D		G,I	N		J,M	L		J	L	
		J			N				N		K,M			N			M	N	
Being able to take measure in case of interruption and detention	B	D	A	B	C,H	A	J	A,B	D		A,B	D		B,H	A		A,B	C	
	E	H	C	J	E	D	L	C,H	F		C,H	E		G,F	C		H,G	D	
	L	E	F	L	G	F		E,G	N		G,F	J		I,J	D		F	E	
	N	G			I			I,K			I,K	L		K,M	E		I	L	
		J			K				M		M,N				L		J	N	
		K			M										N		K		
Being able to benefit from acclamations and sanctions	B	H	A,C	B	H,G	A	J	H	A,B		A	B,C	B	C	A,D		A	D,H	
	I	G	D	D	I	C		G	C,D		G	D,H			H,E		B	E,G	
		L	E		J	E		K	E,F		N	E,F			G,F		C	F,I	
		M	F		L	F		M	I,L			I,J			I,J		N	J,K	
		N	K		M	K			N			K,L			K,L			L,M	
			J		N							M			M,N				

Table 5. Continued

Classroom management	1st week			2st week			3st week			4st week			5st week			6st week			
	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	
At the end of the lesson	Being able to summarise the lesson	H	A,B	C	H	A,B	F	H	B,C	A,K	D	A,H	B,C	A,B	C,H		B,D	A,C	
		G	D,E	F	G	C,D	K		D,E	L,M		E,G	I	D,G	E,I		H,G	E,I	
		I	J,L	K	I	E,J	M		G,F	N		F	J	F	J,K		F,N	J,K	
		M,N			L,N			I,J				K	L		L,M			L,M	
												N	M		N				
	Being able to give information and homework for the next lesson	B,D	A,C		D	A,H	B	B	H	A	B	A,C	H	D	A,B	C	D	B	A,H
		H,E	G,I		E	G,I	C	D	M	C	D	E	G	H	E,F	J		C	G,F
		F,J			F	K		E		G		F	I	G	N	K		E	I, J
		K,L		J	M		F		I		J	K	I		L		N	K	
		M,N		L	N		J		K		M	L			M			L	
						L		N		N							M		
Being able to prepare students to go out of the classroom	D,H	A,B		A,H	D	B	A	B,C	M	A	D,H	B,C	B,C	A,D	A	B,D	C		
	G,F	C,E		G,F	E	C	D	E,G	N	K	E,G	F,L	H,E	F,L		H,E	F		
	I,J	M		I,J	N	M	H	F,I			I, J	N	G,I	N		G,I	L		
	K,L			K,L			J	L			N		J, K		J, K	N			
	N					K							M		M				

In Table 5, regarding being able to start lesson appropriately of peer assessment, it was determined that six pre-service teachers who had a deficiency and were at an acceptable level have become well trained, 8 of them have had no difference. About being able to draw attention to the lesson, it was concluded that ten pre-service teachers who had a deficiency and were at an acceptable level have become well trained, and there has not been any change in the situation of 4 pre-service teachers. In terms of being able to ensure a democratic learning environment, it was found out that nine pre-service teachers who had a deficiency and were at an acceptable level, have become well-trained, 4 of them haven't had any difference, and 1 of them have had a decrease in performance. In terms of being able to keep interest and motivation in the lesson, it was established that ten pre-service teachers who had a deficiency and were at an acceptable level, have become well trained, and 7 of them have had no difference. With regard to being able to take measures in case of interruption and detention, five pre-service teachers who had a deficiency and were at an acceptable level, have become well trained, and there has not been any change in the situation of 9 pre-service teachers. Regarding being able to benefit from the acclamations and sanctions, it was concluded that nine pre-service teachers who had a deficiency and were at an acceptable level, have become well trained and 5 of them have had no difference. In terms of summarizing the lesson, it was found out that seven pre-service teachers who had a deficiency and were at an acceptable level have become well trained, and there has not been any change in the situation of 7 of them. With regard to being able to give information and homework related to the next lesson, it was observed that 9 of them who had a deficiency and were at an acceptable level, have become well-trained, and 5 of them have had no difference. In terms of being able to prepare students to go out of the classroom, it was established that five pre-service teachers who had a deficiency and were at an acceptable level, have become well trained, and 9 of them haven't had any difference.

Pre-service teachers were asked about how peer-assessment affects classroom management. The data collected from the pre-service teachers are presented in Model 5.



Model 5. Akran Değerlendirmesinin Sınıf Yönetimi Üzerindeki Etkisi

Model 5 reveals that while some of the pre-service teachers claimed that peer assessment has a positive impact on classroom management, some of them claimed that peer assessment does not have any impact on classroom management. Fourteen pre-service teachers who mentioned the positive sides of the approach pointed out that it is effective in ensuring classroom management. PT15 who is one of them who stated that peer assessment is efficient in ensuring classroom management explained *“Classroom management skill which had been inefficient at the beginning, increased positively in the next weeks.”* PT6 who is one of the pre-service teachers who stated that the approach does not have any effect mentioned that the approach is not efficient because we are not always in a teaching position (trainee teacher) and we are not experienced enough. PT6 explained that: *“It was observed that there hadn’t been any general improvement in management due to the hesitations we have since we are not always in a teaching position, we are not experienced enough in classroom management, and we don’t know how to approach students.”*

The Effect of Peer Assessment in Communication Skill

As a sixth subject, it was tried to be investigated the effect of peer assessment technique in teaching practice on communication skills of pre-service teachers. The data collected from pre-service teachers are presented in Table 6.

Table 6. The Effect of Peer Assessment on Communication Skills

	1st week			2st week			3st week			4st week			5st week			6st week			
Communication	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	
Being able to have effective communication with students	B	C,I L,N	A,D H,E	B	G,I M	A,C D,H	J	B	A,C D,H	C	A,B D,H	M	A,B C,D	A,B C,D	H,E	G,F	I,J	K,L	A,B C,D H,E G,F I,J K,L M,N
Being able to give clear explanations and instructions		B,H G,F I,L N	A,C D,E J,K M	B,C D,I	A,H E,GF J,K L,M N	J	C	A,B D,H E,G F,I L,M N	A D M N	B,C H,E G,F I,J K,L	A B,C D H,E F E,I J,K L,M N	F	A,B C,D H,E G,I J,K L,M N						

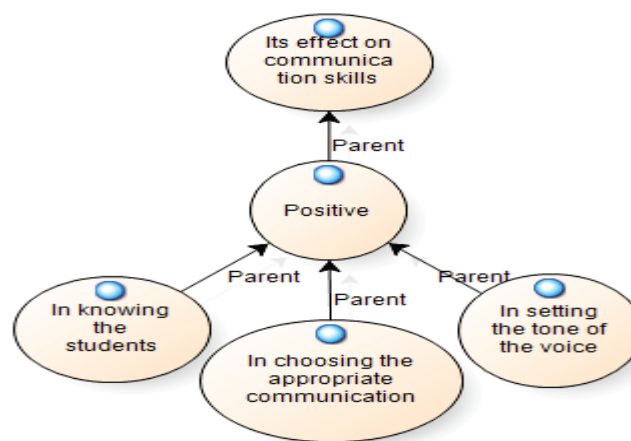
Table 6. Continued

	1st week			2st week			3st week			4st week			5st week			6st week		
Communication	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained	Have deficiency	Kabul dilebilir	Well trained	Have deficiency	Acceptable	Well trained
Being able to ask challenging questions in accordance with the subject	B I M N	A,H G,L J,K	C,D E,F J,K	B A,D C,H	I, J E,G K,L	F,M E,G F,M	J	A,B C,D H,E G,F I, J I, K L,M N	A,B C,D H,E G,F I, J I, J K,L M,N	C D H,E G,F I, J I, J K,L M,N	A,B C H,E G,F I, J I, J K,L M,N	B A,D C H,E G,F I, J I, J K,L M,N	B A,D C H,E G,F I, J I, J K,L M,N	A,D H,E C H,E G,F I, J I, J K,L M,N	A,D H,E C H,E G,F I, J I, J K,L M,N	C A,B D H,E G,F I, J I, J K,L M,N	A B,C D H,E G,F I, J I, J K,L M,N	A,B D,H E,G F,I J L,M N
Being able to use tone of voice effectively	B C D I	K,L N F, J M	A,H E,G F, J M	B D C,I J,K E,G D L F,M J N K M	A,H E,G D C G,F I, N I, J L, M N	A,H E,G D C G,F I, N I, J L, M N	B A H,E G,F I, N I, J L, M N	A C G,F I, N I, J L, M N	H,E G,F I, N I, J L, M N	B D A, C K H,E G,F I, J L, M N	D K H,E G,F I, J L, M N	A, C H,E G,F I, J L, M N	B C E, G F, I J L, M N	A, H E, G F, I J L, M N	A, H E, G F, I J L, M N	A D H,E G,F I, J L, M N	B, C H, E G, F I, J L, M N	A D H,E G,F I, J L, M N
Listening to students with attention		B,C H,E G,F I	A,D H,E G,F I	B D C,I J,K E,G D L F,M J N K M	A,H E,G D C G,F I, N I, J L, M N	A,H E,G D C G,F I, N I, J L, M N	B A H,E G,F I, N I, J L, M N	A C G,F I, N I, J L, M N	H,E G,F I, N I, J L, M N	B D A, C K H,E G,F I, J L, M N	D K H,E G,F I, J L, M N	A, C H,E G,F I, J L, M N	B C E, G F, I J L, M N	A, H E, G F, I J L, M N	A, H E, G F, I J L, M N	A D H,E G,F I, J L, M N	B, C H, E G, F I, J L, M N	A D H,E G,F I, J L, M N
Being able to use verbal language effectively	E I M	A,B E,G J,K L,N	C H F	B,D E,I J,L M	A,C H,G F,K N	B H,G F,K N	B D A, C E H,G F, I J L K, M N	A C H E H,G F, I J L K, M N	A C H E H,G F, I J L K, M N	A D A, C H,E G,F I, J K,L N	B C H,E G,F I, J K,L N	A C H E H,G F, I J L K, M N	D J M E, G F, I K,L M,N	A, B C, H E, G F, I K,L M,N	A, B C, H E, G F, I K,L M,N	D J M E, G F, I K,L M,N	A, B C, H E, G F, I K,L M,N	D C, H E, G F, I J, K L, M N
Being able to use body language effectively	I M N	B,D G,F J,K L	A C H E	D,F I, J K,L M,N	A,B C,H E,G M,N	B C,H E,G M,N	B A C, H D E, G F I, M J N K L	A C H E H,G F, I J L K, M N	A C H E H,G F, I J L K, M N	A B C, D H, E G, F I, J K, L N	B C H, E G, F I, J K, L N	A C H E H,G F, I J L K, M N	D J M E, G F, I K,L M,N	A, B C, H E, G F, I K,L M,N	A, B C, H E, G F, I K,L M,N	A D H,E G,F I, J L, M N	A D H,E G,F I, J L, M N	B, C H, E G, F I, J K, L M, N

Table 6 shows that regarding being able to have efficient communication with students of peer assessment, six pre-service teachers who had a deficiency and were at an acceptable level, have become well trained, 8 of them have experienced no difference. With regard to giving clear explanations and instructions, it was concluded that 11 pre-service teachers who had a deficiency and were at an acceptable level, have become well trained, and 3 of them haven't had any difference. Regarding asking challenging questions in accordance with the subject, it was established that ten pre-service teachers who had a deficiency and were at an acceptable level, have become well trained, and 4 of them have had no difference. With regard to being able to use the tone of voice effectively, it was concluded that eight pre-service teachers who had a deficiency and were at an acceptable level, have become well trained and 5 of them haven't experienced any difference. Regarding listening to students with attention, it was determined that two pre-service teachers who had a deficiency and were at an acceptable level, have become well trained and 12 of them have had no difference. In terms of being

able to use verbal language effectively, it was determined that nine pre-service teachers who had a deficiency and were at an acceptable level have become well trained, and 5 of them have had no difference. With regard to being able to use body language efficiently, it was found out that nine pre-service teachers, who had a deficiency and were at an acceptable level, have become well trained, and 5 of them haven't had any difference.

Also, by observing each other, pre-service teachers were also asked to explain how peer assessment contributes to communication skills. The data obtained from pre-service teachers are presented in Model 6.



Model 6. The Effect of Peer Assessment on Communication Skills

Model 6 indicates that pre-service teachers pointed out that peer assessment has a positive effect on communication skills. 9 of the pre-service teachers who emphasized that peer assessment has a positive effect on communication skills, explained that it is effective in choosing appropriate communication methods, 5 of them stated that it is effective in setting the tone of the voice in teaching, and 3 of them expressed that it is effective in knowing the students. PT4 who is one of the pre-service teachers who mentioned that it is efficient in choosing appropriate communication methods explained that: *"While my friends were teaching the subjects, sometimes they weren't able to have proper communication with students. Therefore, they could not control the classroom. I have learnt the productive communication by making contact with students and finding out the best way."* PT5 who is one of the pre-service teachers who stated that it is effective in setting the tone of the voice explained that: *"Peer assessment enabled me to learn how I should use my tone of the voice on communication and it helped me make progress in this topic."* PT3 who stated that it is efficient in knowing the students explained that: *"It contributes to my communication skills. In the first weeks, I didn't know how to react to speaking students; there were interruptions in the lesson. Later on, I started to make a good connection without interruptions. I started to make communication by considering the children's differences. It has most benefits in this way."*

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Lastly, it was aimed to determine the pre-service teachers' opinions about peer assessment. All the pre-service teachers who participated in the study explained that peer assessment had a positive effect, and they received feedback and established the deficiencies thanks to this approach. Related to this topic, PT9 emphasised that *"This practice is really useful. It is better for us to see our truths and mistakes determined by our peers."*

Discussion, Conclusion and Suggestions

In this study, which aims at revealing the effect of peer assessment on teacher training process, pre-service teachers observed each other during six weeks and evaluated each other with observation form. Pre-service teachers evaluated each other in terms of content knowledge, pedagogical content knowledge, planning, teaching process, classroom management, and communication. Besides, they stated their opinions about peer assessment technique with a semi-structured interview form. As a result of the study, the following results were found out;

- Most of the pre-service social studies teachers, who had a deficiency and were at an acceptable level have become well-trained via peer assessment technique in terms of pedagogical content knowledge. Pre-service teachers pointed out that peer assessment approach plays an important role in forming the lesson plan and using various methods and techniques. Koç (2011), Mirzeoğlu and Özcan (2015) concluded in the study that they carried out that peer assessment determines the pre-service teachers' weak points in terms of craft knowledge, and the process supports the teacher competence.
- Almost all of the pre-service social studies teachers who had a deficiency and who were at an acceptable level have become well trained regarding pedagogical content knowledge via peer assessment technique. Pre-service teachers expressed that the peer assessment approach is important in choosing the appropriate method and techniques. In the study that was carried out by Akıllı (2007), it was indicated that peer assessment has an important role in developing the professional competence of pre-service teachers.
- Most of the pre-service social studies teachers who had a deficiency and were at an acceptable level in planning have become well trained with peer assessment technique. Most pre-service teachers implied that assessment had a positive effect on them in terms of planning the lesson in choosing the suitable material.
- Most pre-service social studies teachers who had a deficiency and were at an acceptable level have become well trained in terms of teaching process via peer assessment technique. Pre-service teachers pointed out that peer assessment approach has a vital role in choosing appropriate assessment and evaluation tools. Bozkurt and Demir (2012) found out in their study that peer assessment increases the pre-service teachers' skills in using strategy.
- Almost all of the pre-service social studies teachers who had a deficiency and were at an acceptable level in terms of classroom management have become well-trained thanks to peer assessment technique. Pre-service teachers indicated that peer assessment technique develops the skill of gaining dominance over the class. In a research done by Mirzeoğlu and Özcan (2015), it was concluded that peer teaching has a positive effect on gaining classroom management skills in pre-service teachers.
- Most of the pre-service social studies teachers who had a deficiency and were at an acceptable level in terms of communication skills have become well trained with peer assessment techniques. Most of them also stated that this technique had a positive effect on them regarding the selection of appropriate communication methods and setting the tone of my voice. In a study, which was carried out by Özcan and Yurdabakan (2008), Mirzeoğlu and Özcan (2015) they determined that self-assessment and peer assessment increase the basic communication skills.
- In general, the pre-service teachers who participated in the study stated that peer assessment had a positive effect and thanks to this technique, they received feedback and they determine their deficiencies. Akıllı (2007), Özcan and Yurdabakan (2008), Şen (2009), Koç (2011), Demiraslan Çevik (2014), Mirzeoğlu and Özcan (2015) revealed in their study that pre-service teachers have positive opinions about peer assessment technique. The results obtained from this study support the results of the studies that were carried out in previous years.

Consequently, it was concluded that peer assessment technique plays an important role in training more qualified teachers and in improving pre-service teachers' competence related to the teaching profession.

Suggestions

Based on the results obtained from the research, the following suggestions are presented related to peer assessment technique;

- A situation in which pre-service teachers are trained better regarding craft knowledge by involving peer assessment process in teaching practices can be created.
- Pre-service teachers can be informed well about peer assessment technique by experts, and they can be informed about the process in details.
- In order to obtain objective results from the peer assessment, groups can be created with the people who don't know each other.
- Other researchers can handle different sides of the peer assessment technique.

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