

## Examining Preservice Teachers' Questioning and Feedback in Teaching Practicum Course\*

Article Type	Received Date	Accepted Date
Research	14.01.2019	22.07.2019

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### Abstract

This study examined the questioning styles of preservice teachers along with the frequency and types of feedback provided according to students' responses. This was a pre-experimental design study with a one-group pre-post-test design. The questioning ways of 13 preservice teachers who taught in two public primary schools in Ankara, Turkey was investigated. The study data were obtained by the video recording of 26 hours of classroom instruction. Moreover, chi-square analysis was conducted to determine relationships between wait time, cognitive level and type of question. According to the results, it was determined that preservice teachers, both before and after training, preferred to use redirecting questions more frequently than creating new questions. It was also observed that preservice teachers frequently asked questions which measured lower level cognitive competencies and that there was an increase for all types of response feedback following the training. However, there was no relationship found between the types of feedback provided and the cognitive levels of the questions asked. The possible reasons for these results might be over-crowded classrooms, focusing on grammar instruction more than reading and writing, and/or inexperience among the preservice teachers to deliver lessons that include high quality questioning and effective feedback.

**Keywords:** Questioning, primary school pre-service teachers, cognitive level, feedback.

\* Some parts of the study was presented at European Conference on Educational Research (ECER) on 4-7 September 2018, in Bolzano, Italy.

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## Öğretmen Adaylarının Öğretmenlik Uygulaması Dersi Kapsamında Sordukları Sorularının ve Geri Bildirimlerinin İncelenmesi\*

Makale Türü	Başvuru Tarihi	Kabul Tarihi
Araştırma	14.01.2019	22.07.2019

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### Öz

Bu çalışmanın amacı, Ankara'daki iki devlet ilköğretim okulunda Öğretmenlik Uygulaması dersi kapsamında uygulamalarını yapan öğretmen adaylarının soru sorma stratejilerini, verdikleri geri bildirimlerin türlerini ve sıklığını incelemektir. Çalışma, deney öncesi desenlerden tek grup ön-test son-test desenindedir. Çalışmanın katılımcıları, iki devlet ilköğretim okulundaki sınıflarda Türkçe dersini öğreten 13 öğretmen adaydır. Öğretmen adaylarının soru sorma stratejileri, verdikleri geri bildirimler ve öğrencilerin cevap üretebilmeleri için bekleme sürelerini incelemek için öğretmen adaylarından izin alınarak dersler video ile kayıt altına alınmıştır. Çalışmanın verileri 26 ders saati boyunca kaydedilen videolar aracılığıyla toplanmıştır. Bekleme süresi, bilişsel düzey ve soru türü arasındaki ilişki için ki-kare analizi yapılmıştır. Elde edilen sonuçlara göre, öğretmen adaylarının eğitim öncesi ve sonrası yeni sorular sormaktan çok yönlendirilmiş soruları kullanmayı tercih ettikleri görülmüştür. Ayrıca, öğretmen adaylarının sıklıkla alt düzey bilişsel yeterlikleri ölçen sorular sorduğu ve eğitimden sonra verdikleri tüm geri bildirim türlerinin sayısında artış olduğu görülmüştür. Ancak, geri bildirim türleri ile sorulan soruların bilişsel düzeyleri arasında bir ilişki bulunamamıştır. Bu sonuçların olası nedenlerinin kalabalık sınıflara sahip olunması, okuma ve yazmadan daha çok gramer öğretimi yapılması veya nitelikli sorular ve etkili geri bildirimler içeren dersler verme konusunda deneyimsizlik olabilir.

**Anahtar Sözcükler:** Soru sorma yöntemi, ilköğretim adayları, bilişsel düzey, dönüt.

\* Bu çalışma, 4-7 Eylül 2018 tarihlerinde, İtalya Bolzano'da, "European Conference on Educational Research (EJER)" kongresinde sözlü olarak sunulan bildirinin genişletilmiş halidir.

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## **Introduction**

Questioning is one of the primary techniques that allows teachers and students to recognize what is already acquired, to use and develop this knowledge, and as a result, develop new insights. In other words, it gives a room for examining ideas and information. The questioning technique can be employed by teachers in order to facilitate pupils to think as well as to encourage them to participate in the learning processes (Wilén and Clegg, 1986). Teachers use the questioning strategy in order for students to learn determined topics (Kim, 2015). Educators use the questioning strategy for several reasons including; to improve students' interest and motivation, to increase critical thinking skills, to examine and summarize previous lessons, and to evaluate reached goals (Moore, 2012). Additionally, using the strategy of questioning helps students develop their analytical and critical thinking skills, increases students' communication skills, encourages them to participate in learning, and helps teachers diagnose learning difficulties (Aydın, 2017). For these reasons, the questioning strategy is one of the most common teaching strategies used by educators.

There are a variety of question types and they are defined as either narrow or broad, convergent or divergent (Moore, 2012). To explain the differences in these question types; narrow questions have one correct response while broad questions can be answered by a variety of different responses. Review of relevant research has indicated that teachers primarily ask closed-ended questions (Lee & Kinzie, 2012; McNeill & Pimentel, 2010; Oliveira, 2010; Walsh & Sattes, 2005). In their study, Wragg and Brown (2001) observed elementary school classrooms analysing a lot of questions asked by teachers, and their results showed that only a few questions were open-ended. The use of open-ended questions would have provided students the chances to engage their higher order thinking. Instead, a majority of the teachers' questions focused on managing their classrooms and checking on students' memorization skills. Similar to this, Lee and Kinzie (2012) found that teachers mostly asked closed-ended questions. In this case though, researchers also observed that teachers' questions varied based on which instruction took place as well as the grouping arrangements. For instance, during experiments in small groups, students received open-ended questions which allowed them to explain their predictions and use reasoning. In another study, it was observed that answering open-ended questions during the storybook reading period helped early childhood students improve their language skills in comparison to their peers from the control classrooms (Wasik et al., 2006).

It is important that for educators to fully take advantage of these questioning strategies they must also affectively utilise redirecting, wait time, halting time, and reinforcement. This issue is paramount in order to provide affective instruction because the kinds of questions asked by teachers and their responses to the students' answers ultimately affects the students' self-esteem and participation during the learning process (Moore, 2012). Previous research has also shown that teachers' questions which need to be answered with higher-level thinking skill stimulates students to ask higher-level questions as well; indeed, it is suggested that there is a significant relationship between the level of questions asked by teachers and students' level of success (Cotton, 2000). For instance, Kim's (2015) study determined that teachers in the treatment classrooms talked less but asked several open-ended questions. Additionally, students in the treatment classrooms provided more higher-order thinking responses than the students in the traditional classrooms. For example, students' responses in the treatment classrooms exhibited important response traits such as claiming, evidencing, challenging, supporting, and defending their reasoning.

Moreover, it is importance to pause for an adequate time following asking a question (Wilén and Clegg, 1986), and as for enhancing students' achievement and motivation, giving feedback constitutes a significant element (Çimer, Bütüner, and Yiğit, 2010; Nichol and Macfarlane-Dick, 2006). After asking questions, teachers are supposed to wait and lead students to find the answers themselves, rather than giving away the answers instantly (Küçük, 2006). What is more, all students should be supported to participate in the learning process and given enough time by the teachers to give voice to their answers.

Teachers should also pay attention to provide effective feedback regarding students' responses. Shute (2008) suggests that feedback is information corresponded with learners for the purpose of altering their thought and doings in order to enhance learning. Also according to Arts, Jaspers, and

Brinke (2016), effective feedback informs students about their present achievement as well as informs them regarding determined criteria and standards to reach in the future. In a case study, Coll, Rochera, and de Gispert (2014) found that the teacher provided three kinds of feedback including; learning context, academic assignment and social participation. The researchers stated that feedback should not only inform students about what they accomplish but it should also inform teachers regarding how to improve students' learning.

Related research has shown that teachers' feedback can be classified and labelled in a variety of ways including; verbal or written feedback; positive or negative feedback; and general or specific feedback. In terms of providing positive and negative feedback teachers should keep in mind that students should receive comprehensive feedback but the teachers should take care to not be too harsh in their negative feedback (Fletcher, 1993). Similarly, students in Mahfoodh's (2017) study stated that seeing too many corrections during the feedback process had made caused them frustration. Instead, providing positive reinforcement and starting from students' strengths is a necessary component of increasing students' confidence (Blake, 1976; Fletcher, 1993). Teachers' most important job is to increase students' confidence and by building on students' strengths creating a promoting environment for teaching and learning to occur. Since "thoughts are merely by-products of conditioned responses" (Bandura, 1984, p. 232), providing supportive or positive feedback is extremely important because students use them as verbal persuasion when deciding upon their level of confidence. This positive feedback in turn encourages the students to be persistent in their effort and learning. In Mahfoodh's (2017) study, students perceived the teachers as experts and accepted their feedback. In other words, receiving praise from the teachers made students feel happy and satisfied, which ultimately built upon their confidence and increased the students' writing skills.

General feedback usually comes in the form of one-word reinforcement provided to students through words like; "Good, Okay, Well, Correct, Excellent, etc." Although general feedback can be affective it is also important to remember; however, that overuse of such statements can cause them to lose their effectiveness (Burden & Byrd, 2010; Moore, 2012; Ornstein & Lasley II, 2004). Specific feedback, on the other hand, informs learners which aspects of their performance were acceptable or unacceptable. As a result, students gain both the information about which aspects they understood and on which parts they still need work (Hattie & Timperley, 2007). Patthey-Chavez, Matsumura, and Valdes (2004) emphasized that the absence of quality feedback on early drafts caused a lack of improvement in students' writing. Teachers should be generous with their feedback because providing feedback can foster students learning of strategies and skills (Anderson, 2000) and students can also become motivated to practice these new strategies (Schmitzer, 1993). Thus, students should be regularly and consistently informed about their performance. In their study, Arts, Jaspers, and Brinke (2016) found that students regarded having clear and timely feedback as being effective. The study aimed to examine the questioning ways of 13 preservice teachers who taught in two public primary schools in Ankara. This study consists of these research questions:

1. How can the questions asked by preservice teachers be distributed according to;
  - a) Bloom's taxonomy,
  - b) Being formulated as open/closed ended,
2. Were any differences spotted for preservice teachers' questions in pre and post- training with regards to;
  - a) Length of waiting time,
  - b) The connection between the length of waiting time and cognitive levels of questions enquired, and
  - c) The connection between the length of waiting time and variables of questions enquired for instance being formulated as open/closed ended.
3. Were any differences spotted regarding preservice teachers' feedback before and after the training with regards to;
  - a) Allocation of feedback?
  - b) The connection between the types of feedback and cognitive levels of questions asked, and
  - c) The allocation of the types of feedback and variables of questions asked based on being open/closed ended.

## **Method**

### **Research Design**

In this pre-experimental design study, a one-group pre-post-test design was used. Following this type of design, the results are compared by gathering data from a randomly selected group before and after the procedure (Campbell & Stanley, 1963). In this study, preservice teachers who were randomly selected for the research group, were observed before and after the training and were also compared in terms of the research variables.

### **Participants**

The participants in the study were 13 preservice teachers (eight females & five males) teaching Turkish language courses in two public elementary schools. The preservice teachers voluntarily participated in this study. The mean age for the preservice teachers was 22, and all of the preservice teachers were teaching for their first time. The participants had also successfully completed the requisite courses for enrolling in the preservice teachers courses (i.e., Teacher Practicum I & II). In addition, preservice teachers teaching courses other than Turkish language courses were not included in this study.

### **Process**

The questions recorded before and after the application were analyzed according to Bloom's taxonomy. The questions asked by the pre-service teachers were coded in "knowledge, understanding, application... and so on categories depending on Bloom's Taxonomy and the keywords of each category. The preservice teachers' classroom instruction was videotaped with their consent for the purpose of investigating the preservice teachers' ways of questioning, duration of waiting time for students to formulate answers and the feedback provided by preservice teachers. After observing all preservice teachers for the first time, each preservice teacher was given training for six hours on how to benefit from Bloom's taxonomy to ask effectual questions, how to create questions which help students improve their higher order thinking skills, and how to provide effective feedback. After all of preservice teachers were observed for the first time, they then received six hours of training to introduce them to effective questioning strategies based on Bloom's revised taxonomy, ways to create questions that can aid students in improving their higher order thinking skills as well as how to provide effective feedback to students. The trainings were given at the theoretical level by the researchers in the face-to-face teaching in a classroom where the pre-service teachers were studying. During this training, examples were given while question-answer and discussion techniques were used. Following this training, the preservice teachers' instructions were again video recorded. As a result, the data for this study were collected by video recorded 26 hours of preservice teacher instructions with 13 hours of observation occurring before the questioning style training, and the remaining 13 observations that took place after the questioning training. Following completion of the video recorded observations, the instructional data were reviewed and analysed by both researchers. The duration of collected instructional data from the first observations totalled 441 minutes and 5 seconds, while the duration of the second set of observations totalled 452 minutes and 8 seconds. During both set of observations any minutes in which students were not being instructed were cut from the observation time. Furthermore, all of the questions and preservice teachers' feedback were transcribed into a Microsoft Word document as well as coded into a Microsoft Excel file where the sub-categories of the variables discussed were determined. A closed-ended form developed by the researchers was used in the coding. While preparing the form, categories were determined according to the definitions accepted in the literature. Related literature is presented in the introduction section of the article. In this context, questions in the form were coded as being new/ redirecting, open/closed-ended, related to daily life with their waiting time. Feedback given by the pre-service teachers were also coded as general, task specific, positive and negative. Bloom's taxonomy that was used in this study included remember, understand, apply, analyze, evaluate, and create steps respectively. Finally, the inter-rater reliability between the coders was calculated as .98. The distributions of the new and redirecting questions which were asked by the preservice teachers are provided in the Table 1.

**Table 1**  
*Distribution of the Questions Asked By Preservice Teachers*

	<b>New Questions</b>	<b>Redirecting Questions</b>	<b>Total</b>
Before Training	260	343	603
After Training	302	486	788
Total	562	829	1391

As it can be seen in Table 1, a total of 1391 questions were asked by preservice teachers during their classroom instruction. Among these questions, there were 260 “new questions” out of a total of 603 questions that were queried prior to the question training. Following the training, the number of “new questions” asked by the preservice teachers increased to 302. On the other hand, it was observed that in general that the preservice teachers preferred using redirecting questions more than new questions, which was a phenomena that occurred both before and after the training.

### **Data Analysis**

For the first of the initial sub-goals of this study, for determining the distribution of preservice teachers' questions according to Bloom's taxonomy, the researchers first examined Bloom's Taxonomy. As a result, a consensus was arrived at by the researchers as to which cognitive level each question should take place. The researchers' came up with a revised Bloom's Taxonomy which consists of six stages: remember, understand, apply, analyses, evaluate, and create (Anderson & Krathwohl, 2001). The first two categories, knowledge and comprehension, are regarded as low-level questions while the remaining four categories; application, analysis, evaluation, and creating, are labelled as high-level questions (Lee & Kinzie, 2012). Frequency and percentages were calculated to determine the distribution of preservice teachers' questions according to the cognitive levels, “being open/closed-ended”.

For the second sub-goal of the study, the wait time of preservice teachers were recorded following the query of each question as well as the descriptive statistics regarding these wait times were calculated. The type of question used was examined within the context of open-ended versus close-ended questions. Particular data or information are asked in close-ended questions to be responded by one correct answer with “yes/no” clause. Therefore, the answer to the question generally given by a few words. This is the reason why close-ended questions might have a restricting effect on children's thinking skills and chance to come up with a limited answer. On the other side of the coin, open ended questions vary from one person to another and necessitate logical thinking and reasoning (Goodwin, Sharp, Cloutier, & Diamond, 1983; Hargreavers, 1984). Chi-square analysis was conducted utilizing SPSS statistical software in order to determine any relationship that may occur between waiting time, cognitive level and type of the question asked. Before conducting out the chi-square analysis related to wait time, four categories of “wait time” were created: one second, two or three seconds, four or five seconds, and finally, six seconds or more of wait time.

For the third sub-goal of the study, the number and types of feedback provided by the pre-service teachers were examined. The teachers' feedback were classified as being positive or negative feedback as well as general or specific feedback. The frequency and percentages regarding the overall distribution of feedback and the distribution of feedback for specific question types were investigated. Also, relationship among cognitive levels of the questions asked both before and after the training as well as the types of feedback provided were analysed through the chi square test.

### **Results**

For the first sub-goal of the study, the distributions of questions queried by the preservice teachers according to Bloom's taxonomy are provided in Table 2.

**Table 2**  
*Questions Asked by Preservice Teachers Based on Bloom's Taxonomy*

		<b>Remember</b>	<b>Understand</b>	<b>Apply</b>	<b>Analyse</b>	<b>Evaluate</b>	<b>Create</b>	<b>Sum</b>
Before training	f	207	347	35	1	7	6	603
	%	34.32	57.55	5.80	0.17	1.16	1	100
After training	f	334	374	72	3	0	5	788
	%	42.39	47.46	9.14	0.38	0	0.63	100

The results in Table 2 reveal that the total number of questions asked by preservice teachers increased following the question strategy training. The questions asked by the preservice teachers most often were “understand” level questions (57.83%). Next, “remember” level questions were asked 34% of the time. Following the training, those questions which preservice teachers asked at the highest rate were at the level of “understand” (47.46%). In addition, it is recognised that the preservice teachers used “remember” level questions at a rate of 42.39%. Finally, the observations also determined that the number of “apply” level questions had increased following the training. Within the scope of the first sub-goal of the study, the distributions of questions asked by preservice teachers as being open/closed-ended are provided in Table 3.

**Table 3**  
*Distributions of Questions Asked by Preservice Teachers As Being Open/Closed-Ended*

		<b>Open-ended</b>	<b>Closed-ended</b>	<b>Total</b>
Before training	Frequency	51 8	85	603
	Percentages	86	14	100
After training	Frequency	68 1	107	788
	Percentages	86	14	100

As seen in Table 3, the questions asked by preservice teachers both before and after the training consisted of “open-ended” questions at a very high rate (86%). The increase in the number of questions asked by preservice teachers following the training was the same for both question types. Within the scope of the second sub-goal of the study, averages were calculated for the differences in terms of preservice teachers' wait time following the asking of a question which occurred between pre/ post-training. The descriptive statistics for the preservice teachers' wait time are provided in Table 4.

**Table 4**  
*Descriptive Statistics for Preservice Teachers' Wait Time*

<b>Wait time</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>	<b>SD</b>
Before training	3.25	1	1	18.01
After training	2.26	1	1	10.90

As seen in Table 4, the average wait time of preservice teachers before training was 3 minutes and 25 seconds. Surprisingly, the duration of wait time decreased following the training to 2 minutes and 26 seconds. The decrease in average wait time observed among the preservice teachers following the question strategy training is thought to have resulted from the course content being focused on grammatical issues. In addition, the second sub-goal of the study examined whether differences occurred in preservice teachers' questions before and after the training in terms of the length of wait time and the cognitive levels of the questions asked. The results revealed a significant relationship between the length of wait time and the cognitive levels of questions asked prior to the training ( $X^2=9.28$ ,  $df=6$ ,  $p=0.159$ ;  $p>0.05$ ). Similarly, there was not a significant relationship found between

the length of wait time and cognitive levels of questions asked following the training ( $X^2=7.44$ ,  $df=6$ ,  $p=0.282$ ;  $p>0.05$ ).

Lastly, the relationship between preservice teachers' wait time and the types of questions; for example, open/closed-ended both before and after the training were analysed. Importantly, the data revealed no significant relationship between the length of wait time and open/close-ended questions prior to training ( $X^2=1.71$ ,  $df=3$ ,  $p=0.635$ ;  $p>0.05$ ). Also, no significant relationship was determined between length of wait time and open/closed-ended questions following the training ( $X^2=1.36$ ,  $df=3$ ,  $p=0.714$ ;  $p>0.05$ ). For the third sub-goal of the study, the distribution of the frequency and kinds of feedback provided prior or following the training are presented in Table 5.

**Table 5**  
*Distribution of Preservice Teachers' Feedback Before and After Training*

		<b>General feedback</b>	<b>Task specific feedback</b>	<b>Positive feedback</b>	<b>Negative feedback</b>	<b>Sum</b>
Before training	<i>f</i>	72	50	95	28	245
	%	30	20	39	11	100
After training	<i>f</i>	76	60	101	34	271
	%	28	22	37	13	100

When the feedback provided by the preservice teachers according to the students' responses were examined, it was recognized that there was an increase in the amount of feedback which followed the training, yet it should also be highlighted that the amount of feedback provided was insufficient when considering the total number of questions asked before and after the training. In addition, it is important to point out that following the training there were increases in all types of feedback. The increase in all types of feedback may be related to high number of questions following the training, but the feedback increase may also be a result of the training itself. In this study, the amount of negative feedback also increased following the training; nevertheless, it is believed by the researchers that the negative feedback acted as a form of corrective feedback.

For the third sub-goal of the study, chi-square analysis was conducted to determine possible relationships between the cognitive level of the questions asked and the type of the feedback provided. The chi-square analysis for the third sub-goal showed that there was no significant relationship between the provided feedback and the cognitive levels of questions asked prior before the training ( $X^2=3.47$ ,  $df=4$ ,  $p=0.482$ ;  $p>0.05$ ). In addition, there was also no significant relationship found between the feedback provided and the cognitive levels of questions asked following the training ( $X^2=3.23$ ,  $df=4$ ,  $p=0.520$ ;  $p>0.05$ ). The distribution of feedback according to the type of question asked within the third sub-goal of the study, are provided in Table 6.

The feedback provided by pre-service teachers' according to their students' responses were analysed under the categories of general, specific, positive and negative feedback. The study data showed that none of the preservice teachers' did not provide any negative general feedback. As a result, the types of feedback examined were presented under three categories: positive-general, positive-task specific, and negative-task specific. The results provided in Table 6 show that following the training there was an observable increase in the number of closed-ended questions as well as positive-general feedback.

**Table 6**

*Distributions, in Terms of Question Types, of Preservice Teachers' Feedback Before and After the Training*

			Open-ended	Closed-ended	Total
Positive-general	Before training	F	65	1	66
		%	98	2	100
	After training	F	61	19	80
		%	76	24	100
Positive-task specific	Before training	F	18	0	18
		%	100	0	100
	After training	F	25	4	29
		%	86	14	100
Negative-task specific	Before training	F	25	4	29
		%	86	14	100
	After training	F	26	4	30
		%	87	13	100

### Discussion, Conclusion and Recommendations

The study investigated the questioning styles according to the variables and types of questions asked and the types and frequency of feedback provided by the preservice teachers' to students' questions. For investigating the questioning ways of preservice teachers, their classroom instruction was video recorded following to receiving their permission. The study data revealed that both before and after the training the preservice teachers preferred using redirecting questions more often than creating novel questions. It appears these results may have occurred because the classes were overcrowded and/or that grammar was the primary topic taught. Although this was the case, because the preservice teachers' utilized the redirecting strategy for the same questions, they were able to question a variety of students and get more students actively involved in the instruction process, which ultimately encouraged the more introverted students to participate and provide responses (Moore, 2012).

It was promising to see that the participant preservice teachers asked open-ended questions both before and after the training. In both stages of observation, prior to and following training, the ratio of preservice teachers' closed-ended questions was less than 15% of the total number of questions. The preservice teachers tended to avoid using closed-ended questions because these questions check students' memorization and recalling of learned facts rather than analyse the experience and/or ability to formulate answers (Kim, 2015). Also, by using a high number of open-ended questions the participating preservice teachers were able to provide opportunities to expand their students' thinking (Massey et al., 2008). Past research studies have specified the positive influence teachers' open-ended questions can have on students' learning, particularly in language success (Conezio & French 2002; Wasik et al., 2006). However, it was also seen in this study that even though preservice teachers asked primarily open-ended questions, their questions frequently measured at a low level of cognitive competency. This situation was similar to other studies from related research literature (Aslan, 2011; Nisa & Khan, 2012; Wilen, 1991). However, educators should acknowledge that asking higher-order level questions allows students to engage more fully in predicting, inferring, and analysing (Wasik, Bond & Hindman, 2006). The reason why there was an increase in "Remember" level questions as well as in closed-ended questions is thought to be related to the course content, which focused primarily on grammatical issues, especially after the training. Also, the finding that preservice teachers preferred open-ended questions both before and after training is consistent with past research. The observations revealed that these preservice teachers tried to involve their students in the instruction by asking open-ended questions, which is important because this type of question tends to

encourage learners to create a broader range of responses and become more involved in the learning process (Moore, 2012).

Another point from this study that is important to discuss is the undesirable situation that occurs when preservice teachers' wait time is only a few seconds long no matter if the questions asked were open/close-ended and/or whether the questions were from a high/low cognitive level. In past research, it was recommended for teachers to provide a reasonable amount of wait time when asking high-level questions and waiting for students to formulate their answers in order for appropriate time be allowed for high-level thinking to be carried out (Moore, 2012).

Increases in all types of feedback following the training were revealed in this study, and this finding is important because related research has highlighted the importance of continuously providing feedback to learners (Gibbs & Simpson, 2004; Nicol & Macfarlane-Dick, 2006). The increase in feedback which occurred following the preservice teachers' training may have been a result of an increase in the number of questions asked and/or from the recommendations received during the training. A previous study on students' preferences had shown that students want and need immediate feedback (Van der Kleij et al., 2012), so it was a promising finding that a large amount of immediate feedback had been provided by preservice teachers in this study. However, it is also critical to highlight that no relationship was found between the types of feedback and the cognitive levels of the questions asked.

It was also promising in this study to see that the participating preservice teachers had mainly provided feedback that was positive and task-specific. Providing this type of feedback is recommended (Brinko, 1993; Gibbs & Simpson, 2004; Shute, 2008; Straub, 2001) in order to better understand what needs improving. The second observation, which occurred following the training, revealed that the participating preservice teachers reduced the percentage of general feedback they provided while increasing the percentage of task-specific feedback. Even though general feedback or praise may interfere with learners' performance in some situations (Kluger & DeNisi, 1996) by providing a higher number of task-specific feedback, preservice teachers helped students to more clearly recognize their progress. As Hyland (2013) stated, through specific feedback students see their weaknesses and strengths and as a result can better develop their skills. Furthermore, providing positive feedback is related with increasing students' levels of self-efficacy, and according to Bandura's Social Cognitive Theory (1977), people gain information about their capabilities from four sources: performance and achievements, vicarious experience, verbal convincing, and emotional arousal. The findings of the study yielded that the number of negative feedback provided was also higher after the training; however, as stated earlier this feedback were given to students to correct their responses. The preservice teachers were reminded to not provide criticism in a harsh manner so that students would not see them as a threat (Brinko, 1993; Straub, 2001) as well as students would be better motivated to take risks through positive forms of feedback (Zacharias, 2007).

Study results yielded that the participating preservice teachers primarily asked lower-level questions both before and after the training. Preservice teachers should be reminded that asking higher-order questions rises the quality of instruction (Küçük, 2006), and additionally, high quality questions increase the thinking process and creative thinking skills of students (Lee & Kinzie, 2012). Also, students can imitate their teachers' behaviour and eventually they can also produce higher-order thinking questions. However, for students to gain this experience, teachers should (1) know the importance of asking qualified questions, (2) know the characteristics of qualified questions, (3) ask quality questions (i.e., pose effective questions), (4) allow students to pose questions, and (5) provide feedback and corrections regarding the quality of students' performances (Yeşil, 2010). However, simply asking effective questions is not enough to create a successful learning experience. As Aydın (2017) stated, if students' correct answers are not reinforced and teaching is not supported through other techniques, the use of effective questioning strategies alone might not reach the desired purpose and cannot fully bring forth the benefits of learning.

Based on this study's findings, it can be said that preservice teachers were not successful in integrating what they learned during the training into their teaching experiences. Thus, extending the duration of the training can be recommended. Furthermore, instructors can be a role model for

preservice teachers during their undergraduate education in terms of asking high-order thinking questions as well as providing task-specific feedback. Pre-service teachers can prepare assignments in which they examine and explain kinds of feedback and how to give effective feedback during their teaching practicum course. Pre-service teachers' questioning and giving feedback applications can be investigated while teaching diverse subjects and in other universities as well.

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