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Preservice Science Teachers' Views On The Traineeship Applications

Öğretmen Adaylarının Okul Deneyimi Uygulamalarına İlişkin Görüşleri

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Abstract

The purpose of this inquiry is to reveal the preservice science teachers' views toward the traineeship in school experience course. The participants of this qualitative research were 18 volunteered teacher candidates studying at the Department of Primary Science Education in Dicle University, Diyarbakır, Turkey. The data used in this study was gathered through face-to-face interviews by the researchers. When evaluated the opinions of preservice science teachers about traineeship applications in School Experience I Course, the most of the trainees reported that they encountered problems with their guiding teachers and school administrations. However, it was seen that they were able to take important lessons from these negative situations. Nevertheless, although the all negative situation they faced, the preservice science teachers suggested traineeship experience to start earlier education levels. Overall, in order to make effective traineeship application for teacher candidates' sake, collaboration of school-faculty should improve; an evaluation mechanism should be prepared to assess guiding teachers and school administrators; inservice teachers should take inservice training to cope with trainees especially for communication and becoming model for them.

Öz

Bu çalışmanın amacı fen bilgisi öğretmen adaylarının Okul Deneyimi dersindeki staja yönelik görüşlerini incelemektir. Bu nitel çalışmanın katılımcılarını Dicle Üniversitesi'nde okul deneyimi dersini almış bulunan 18 gönüllü fen bilgisi öğretmen adayıdır. Çalışmada kullanılan veriler yüz yüze görüşmeler ile toplanmıştır. Öğretmen adaylarının Okul Deneyimi I dersindeki staj uygulamalarına yönelik görüşleri değerlendirildiğinde, çoğu katılımcının rehber öğretmenleri ve uygulama okulu idarecileri ile sıkıntılar yaşadığı görülmüştür. Ancak öğretmen adaylarının yaşadıkları sıkıntılı durumlardan kendilerine önemli dersler çıkardıklarını da ifade ettikleri tespit edilmiştir. Her ne kadar olumsuzluklarla yüzleşmiş olsalar da, öğretmen adaylarının genel olarak staj deneyiminin daha erken sınıf düzeylerinde başlaması gerektiğini belirtmişlerdir. Sonuç olarak, öğretmen adaylarının yararına olacak etkin bir staj uygulaması için okul-üniversite işbirliğinin güçlendirilmesi, rehber öğretmenleri ve staj okullarının değerlendirilmelerine imkan veren bir mekanizmanın geliştirilmesi ve öğretmen adaylarına rol model olmakta olan rehber öğretmenlerinin stajyer öğretmen adaylarıyla daha iyi iletişim kurmalarına yardımcı olacak hizmet içi eğitimler almaları gerektiği düşünülmektedir.

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Anahtar kelimeler: Fen bilgisi öğretmen adayı, staj, okul deneyimi, görüş

Introduction

The quality of education is one of the most debated issues in Turkey, as it is all over the world. The one of the most important components determining the quality of education is teachers. Enhancing the quality of teachers can be possible through giving due importance to studies of preservice teacher training (Ören, Sevinç and Erdoğmuş, 2009). Basically, teacher education program is composed of two integrated elements that help the improvement of student teachers' learning. The first component is university-based courses, which bring knowledge about teaching theoretical background to preservice teachers. The other one is the field-based component in which student teachers gain experiences on teaching in the field (McIntyre, Byrd and Fox, 1996; Brickhouse and Bodner, 1992; Britzman, 1991). Since preservice teachers' experiences in the schools shape their perceptions of teaching, learning and school contexts (Richardson, 1996), it is significant for preservice teachers to complete their field-based components with positive gains and experiences. Despite its' importance, it is widely accepted that teachers are inadequate with regards to knowledge and skills for professional practice, while they are sufficient in terms of academic knowledge (Özdemir and Çanakçı, 2005). For example, teachers specifically who enter upon working reported that they have problems with keeping discipline in classroom, evaluating the students' performance, using the appropriate materials, motivating students, perceiving the individual differences (Azar, 2003). Similarly, in the study of Güzel and Oral (2008), teacher candidates reported that the most challenging activities are classroom management and controlling the students. In order to overcome these problems, it is important to raise preservice teachers as well-equipped in both areas (i.e., university-based and field-based). Much as universities execute teacher candidates' academic education, this academic knowledge should be integrated with practicing in order to gain professional competency of teacher candidates (Wong and Tsui, 2007; Özkan, Albayrak and Berber, 2005; Hones, 2000).

Faculties and schools should have equal importance in teacher training (Stephens and Crawley, 1994). In this regard, cooperation between universities and school should be provided, and necessary responsibility should be shared among them. However, healthy communication among universities and Ministry of National Education could not be provided for many years in Turkey, as in many countries (YÖK, 2007). These dissatisfactions with existing programs lead to restructuring of teacher education programs, and bringing some novelties to the area of teacher education in 1998 by Turkish Council of Higher Education (YÖK). A model, labeled as "faculty-school partnerships" was set up (Boz and Boz, 2006). With this model, it is aimed to integrate academic knowledge with practicing (YÖK, 2007). For this purpose, teacher education programs began to focus on practicing and emphasis more on subject teaching courses and work in schools. Therefore, the new program included new courses such as Classroom Management, School Experience I, and School Experience II (YÖK, 1998a, 1998b). By means of these courses, preservice teachers began to gain experience in real settings, and school teachers become to be more involved with teacher candidates' teaching practice activities and school experience (Boz and Boz, 2006).

School Experience I is the first on-site practice course that improves teacher candidates' quality in terms of the requirement of the teaching profession, and contributes them to be experienced and well-equipped. The purposes of this course are to familiarize teacher candidates to school climate; to enable them to understand the structuring in the school; to introduce the units and components of school; and to bring them necessary knowledge and skills (Harmandar et al., 2000). In addition to these experiences, by adding school experience course into the teacher education program, it is also aimed to introduce school management and organization to teacher candidates; and enable them to recognize daily life in schools; and make them join extracurricular activities; and provide that teachers candidates perceive the teaching profession clearly and internalize it (MEB, 1998). Within this course, teacher candidates are allowed to observe the experienced teachers on duty; to study with small groups individually; to gain experience in teaching (Ergünes, 2005). The implication of this course is based on observations that aim to introduce and bring the requirements of the teaching profession to teacher candidates (Ören, Sevinç and Erdoğmuş, 2009). It is thought that teacher candidates'

interests and attitudes towards teaching profession can be developed as a result of these activities and observations. Determining these attitudes and views, and assessing them with various variables are important to shape their attitudes and conceptions about teaching, learning and school contexts (Çil and Çapa, 1998). However, the scope of this study remained in preservice science teachers' views on traineeship in the school experience I course.

Some of the studies focus on the effectiveness of the teaching applications; and revealed the positive contribution of the teaching applications in practice schools on teacher education and improvement (Brooks and Sikes, 2006; Beck and Kosnik, 2002; Burton, 1998). For example, Oğuz (2004) investigated the effects of the activities which are performed in the scope of the course on attitudes and opinions of preservice teachers, and reported that school experience course has positive effects on student teachers' attitudes and opinions concerning teaching profession, their own branch, and primary school students. Therefore, he concluded that school experience course should take part in the teacher training program. According to the study of Turgut, Yılmaz and Firuzan (2008), preservice teachers thought that school experience course is necessary for their education, since it endears teaching profession to them; allows them to gain occupational experience, and gives clue about student behaviors and teachers' attitudes against these behaviors. Similarly, Özdemir and Çanakçı (2005) compared the preservice math teachers' definitions of teaching and learning concepts before and after taking this course, and revealed differences. It was shown that preservice math teachers who have traditional teaching perception before taking the course changed their views after taking course, and reported that they adopt modern teaching understanding. Moreover, in the study of Sevim and Ayas (2002), they examined the effectiveness of the activities in school experience course. They found that these activities enable student teachers to familiarize the profession of a teacher and schools' organizational structures and functioning.

Conversely, some studies concluded various problems which may result from university supervisor, guiding teacher, or practice school during traineeship process. Further, Kiraz (2002) reported that preservice teachers assume a negative attitude towards school, students, and teaching profession. In the study of Yapıcı and Yapıcı (2004), preservice teachers reported encountered problems during School Experience I course. These are contradiction between the

theoretical knowledge in the faculty and the applications in the school; the inadequacy in coordination of school and faculties; uncertainty of the status of teacher candidates in schools; the avoidance of practice teachers from sharing their plans and discussion in classroom environment; the crowdedness of teacher candidates under a practice teacher's consulting. Similarly, Aydın, Selçuk and Yeşilyurt (2007) remarked that teacher candidates stated that the coordination of school and faculty was insufficient; communication of school administrators was weak; school teachers were not qualified enough to guide the student teachers. In addition, Çetin and Bulut (2002) administered a questionnaire to teacher candidates and guiding teachers. The results indicated that school stakeholders do not have enough knowledge about their authority and responsibility; teachers do not tend to share their knowledge and experiences; teacher candidates are unaware of the chance of experience; and teachers complain about that traineeship group under his/her consulting is too crowded.

Existing available literature indicated that most of the studies conducted with the preservice teachers were from mathematic or primary school teaching departments. Therefore, the studies conducted with preservice science teachers about this issue seem to be limited. Further, most of the design of these research is quantitative which focus on objective measurements such as questionnaires; gathering statistical or numerical data analysis to explain a particular phenomenon (Babbie, 2010). Based on the literature review, there was not any elaborated qualitative research on presenting preservice science teachers' opinions about traineeship in School Experience course. Therefore, this study intends to fill this gap in this area by using face to face interviews as a data collection type.

Accordingly, the purpose of this inquiry is to reveal the preservice science teachers' views toward the traineeship in school experience course at a university in Turkey. With this in mind, it is aimed to address following research questions:

1. What are the expectations of preservice science teachers from the traineeship applications?
2. What are the views of preservice science teachers toward the traineeship applications?
3. What are the barriers to effective traineeship experience according to preservice science teachers?

4. What are the suggestions of preservice science teachers for improving the traineeship applications?

Although school experience course such as to enable teacher candidates to be successful teachers, intended success could not been acquired mostly. Despite the importance of field-based education, there are still problems with conducting traineeship. Therefore, it is thought that this study may explore where the problem is during traineeship process. Further, suggestions for solutions of these problems might be presented. This research may provide valuable insight about the efficiency of the traineeship applications for preservice science teachers. Additionally, findings of this research may help curriculum developers in revising the curricula of School Experience course and faculty members to rearrange their course and to determine which schools and teachers will involve in traineeship process.

Methodology

Design

To understand the teacher candidates' views about their traineeship process from a closer perspective and to get deeper information, this study was designed as qualitative research which relies on text data, interactive and interpretive methods. Intrinsic case study can be identified the strategy of this inquiry, since it tries to better understand the specific case, views of preservice science teachers toward the traineeship without asserting a theory or making a generalization (Stake, 1994).

Participants

The participants of this study were 18 volunteers from a total course size of 40 teacher candidates studying at the department of Primary Science Education in Dicle University, Diyarbakır, Turkey. These participants were determined based on the convenience and criterion sampling methods. In convenience sampling, the researcher prefers to choose participants who are easy and close to reach. Furthermore, in criterion sampling, selection is made from those which are suitable for defined criteria. These criteria can be made by researchers or prepared a criteria list (Yıldırım and Şimşek, 2013). This study's criterion for sampling was to teacher candidates' traineeship exercise in the schools within the School Experience I Course.

Data Collection Procedures

The data used in this study was gathered through face-to-face interviews by the researcher in order to get deeper information. The interviews allow the interviewer to probe and clarify and check that they have understood correctly what is being said and permit participants to describe detailed personal information. Interviews were conducted in the seminar room of the Education Faculty of Dicle University at the end of the first academic term in which all participants complete their traineeships. Each of the interviews took approximately 15-20 minutes. The interviews were audio-taped with permission of participants and then transcribed. Although the questions of the interviews were determined before, interviewer performed it in a conversational method, and asked follow-up questions when needed. To determine the interview questions, a pilot study was performed with four preservice science teachers who enrolled the same course in the same university. After the pilot study, several questions were determined to be asked in the main study.

Data analysis

Content analysis was conducted to analyze the data. Within this purpose, after the interviews were transcribed, these transcripts were reviewed numbers of times by the researcher, and the related parts with the research questions were underlined. Then, recurring topics were identified in the coding process. After generating codes, codes that related to each other were clustered together. Once the researchers came up with this categorization, codes were labeled to make them meaningful to others. Finally, as it can be seen in the Table 1, five main themes (expectations, positive views, negative views, barriers, and suggestions) were identified. Seven codes were formed in the expectations theme; a total of twenty codes in three categories were clustered under the positive views theme; totally thirteen codes in three categories were placed under the negative views theme; eight codes in two categories within the difficulties theme; and seven codes in two categories were labeled in the suggestions theme.

To check the accuracy of the findings some strategies were used in this study. For example, the process of data analysis was explained in detail, by presenting examples from codes in the study (Fraenkel and Wallen, 2006) (see Table 1). Additionally, each category labeled in the study was

illustrated with the most representing example chosen from the data. Moreover, peer debriefing technique was used. For this purpose, an expert who has a Ph.D. degree in science education reviewed and evaluated the coding processes and reports. Finally, inter-coder agreement technique was used to ensure reliability. That is, 20% of the data was coded by two independent researchers, and then to see the degree of agreement between these researchers, codes and categories developed by them were checked against. The ratio of consistency was found as .83. Incongruities were discussed and remaining part of the data was reviewed according to this discussion. Then, same procedure performed with all data and it was seen that 91% agreement was existed. Since this value is higher than 90%, it can be said that it shows sufficient consistency (Miles and Huberman, 1994).

Findings

In order to obtain the preservice science teachers' expectations toward traineeship before training period, opinions based on their experiences after training period, barriers to an effective traineeship experience, and suggestions to improve traineeship applications, open-ended questions were asked to the participants. As can be seen from the Table 1, five themes were formed based on the participants' answers, which are namely "expectations", "positive views", "negative views", "barriers", and "suggestions".

Expectations of preservice science teachers about traineeship experience

The participants were asked to a question to determine what they expected from the traineeship before their training period started. According to the responses of the preservice science teachers, their expectations were related to one category, professional expectations. Specifically, their expectations were labeled as "contributing to my professional development", "endearing the profession", "feeling like a teacher", "applying teaching methods and techniques", "interacting with students", "getting support from the supervisor academician", and "giving a lecture" (Table 1). The participants reported:

> *"I was excited and happy before the traineeship started. I was going to have first chance to take care of students in my life. My expectations were to recognize students closely, and to observe the guiding teacher's behaviors in the class. Also, [my expectations were] to watch*

the teacher as a student, and to understand what to do in my professional life." (Participant 2)

"I felt excited before I started to training. I was thinking that teaching profession is a hard job. I was wondering how to communicate with students; which teaching method applies how. Moreover, I was curious about whether I could gain professional experience with traineeship experience." (Participant 13)

Views of preservice science teachers about traineeship experience

In the positive views category, three categories were extracted which are "teaching profession", "recognizing the school", and "within-classroom observations". In the teaching profession category, the participants' views were gathered in seven units such as "endearing the profession", "realized to eliminate my deficiencies", "self-confidence in becoming teacher", "a love-based profession", "feeling like a teacher", "necessity of having conscience, patience, and tolerance" and "taking guiding teacher as a model" (Table 1).

"I got along well with the students [in the school during my traineeship]. Actually, their interest made me like the teaching profession." (Participant 3)

"(…) so glad there is traineeship, and I went to it regularly. I used to say unnecessary before I went, but, I now realized this was wrong. Thanks to traineeship, I conceived to do teaching profession without stress. Moreover, I got used to school environment." (Participant 12)

"I learned how I should give a lesson, and how I should behave to my students when I become a teacher. I understand that teaching is not so easy, and it requires some preparations before coming to the class." (Participant 6)

Additionally, seven units of code were obtained in recognizing the school categories. These are "seeing physical conditions on site", "interpersonal interactions in school", "learning professional responsibilities and duties", "learning of working of school", "learning of school administration structure", "learning of school rules", "observing multicultural school environment" (Table 1). Following statements were from this category.

"Well. We were informed about the school structure. We learned how the school works. We learned the physical facilities of the school environment. I did not know them before." (Participant 2)

"Traineeship helped me to understand the relationship between teacher and student; the dialogue among teachers; and how we should behave to students in classroom environment." (Participant 4)

> *"I understand the importance of school managers' performing their duties duly. I think a strong coordination between each other's affects both teachers and students positively. Thus, a positive learning climate occurs in school." (Participant 5)*

In addition, positive views of the participants were categorized as within-classroom observations based on what they have seen during their observations in the classroom. Six units were derived based on the data collected, which are namely "establishing empathy with students", "considering of individual differences", "importance of value education", "necessity of becoming role model as a teacher", "necessity of good communication skills", "gaining classroom management skills" (Table 1). To illustrate, following examples can be given:

> *"(…) I think understanding human psychology is more important than teaching in my opinion. I took a lesson from my guiding teacher about how to treat students and how to contact with them." (Participant 1)*
>
> *"My guiding teacher controlled whole the classroom but he was yelling them too much. I suppose, students were afraid of their teacher very much. It [guiding teachers' methods for classroom management] was so different from methods and issues that we learned in classroom management course." (Participant 10)*
>
> *"Not giving enough support and not being attentive to inclusive students is too sad. They are neglected in classrooms, and I think the instruction is not suitable for them. At least, they [teachers] should be sensitive about individualizing the instruction." (Participant 8)*

Preservice science teachers stated their negative thoughts as well as positive ones. Their answers were clustered again into three categories as it was in the positive views theme. Since some of the participants expressed that they were demoralized by school teachers, they started to develop negative views toward teaching profession. Moreover, contrary to some preservice science teachers, some participants experienced negative situations in recognizing school category due to "unconcerned school administration and teachers", "negative school climate", "undisciplined school organization" and "witnessing to relationships based on self-interest". Lastly, seven code units were labelled in negative within-classroom observation category, which are "insulting to students", "threatening with low grade", "shouting to students", "ignoring inclusive students", "humiliation and violence to students", "giving punishment to students" and "not identifying misbehaviors reasons of students (Table 1). Sample six negative views of the preservice science teachers were given below.

"Shouting to the students does not change anything. But the guiding teacher was always did this"..."The teachers and the principal in the school we went had great uninterested in us. They did know of us, did not value us. The educational environment was so bad. I took no support from them. So I don't think they contribute us anything."... "Our guiding teacher was not so good. S/he always threatened us to give low grade as if we are no preservice teachers but rather his/her students." (Participant 4)

"My guiding teacher was so stressed since traineeship students were in his class, and thus he cannot lecture the class comfortably. He neither did take care of us nor did want us to be in his class. Therefore, we had communication problems. Actually, I was going willingly to my traineeship school, but the teachers' attitudes and behaviors discouraged me and my friends." (Participant 3)

"Actually, I met a lot of teachers in the senior common room, who were tired of students and the profession. Most of them stated that their efforts do not have any effect on students' improvement, no matter how they try, they cannot produce success. This situation caused that we began to be pessimistic about the occupation that we will have in future." (Participant 7)

"The managers and teachers in the traineeship school were so unconcerned. The school had discipline issues so the school environment was not so appropriate for education. I think this was resulted from the deficiency of organizational vision of the school. Therefore, the school administration failed to motivate teachers and students." (Participant 15)

"I think the most salient observation of mine was that the communication among school managers and teachers relied on relationships based on self-interests. I witnessed the fact that they would evade responsibilities if their demands are ignored." (Participant 7)

"(...) it exactly affected me positively. It needs to be patient for interacting closely with students but it is worth... In fact, this traineeship is a proof of what kind of students are waiting us in real life. Teaching to someone is very well." (Participant 11)

Based on the responses of preservice science teachers about traineeship experience, it was seen that traineeship experience mostly contributes to their opinions toward teaching profession in positive way. On the other hand, the traineeship experience were negatively affected them especially during their observations guiding teacher-student relationships.

Difficulties encountered of preservice science teachers during traineeship experience

The participants were asked to respond an open-ended question to state what difficulties they came across during the traineeship experience by the question "What kind of difficulties did you encounter during your traineeship". According to the responses of the participants, two categories were formed (Table 1). Firstly, the preservice science teachers were struggled in traineeship school staff such as "communication problems with guiding teacher", "misbehavior of guiding teacher toward trainees", "apathy of school administration and teachers",

"inadequacy of guiding teachers". Moreover, the participants stated that they suffered from the difficulty in traineeship school environment such as "crowded classrooms", "lack of materials", "transportation to the school", "bad physical conditions of the school" (Table 1).

The preservice science teachers' expressions about these difficulties are as follows:

> *"Our greatest difficulties were undesired situations between the guiding teacher and us, failing to express ourselves to him/her, or the guiding teacher's unwillingness to understand us." (Participant 1)*
>
> *"Transportation to the school was the biggest problem for me. Because there is no bus going to the school"... (Participant 2)*
>
> *"There was an inclusive student in the classroom. The guiding teacher did not care about her. She did not give permission to speak, and unfortunately the teacher humiliated his/her by resembling misbehaving students to the inclusive student in the classroom. Plus, I witnessed violence to the students by the teacher. I think she could have treated them more gently. These issues left us in difficult situations." (Participant 4)*
>
> *"I took a dislike to the teaching profession. Since most of the teachers were not awake to their profession, and not competent enough, we could not get necessary support. Because they were not qualified teachers, unfortunately they could not train us to be a teacher who can be awake to teaching profession." (Participant 17)*
>
> *"I saw that learning was hindered due to crowded classrooms. Plus, one of the other biggest difficulties is that there is no course material related to subject and science lesson." (Participant 9)*

The responses of the participants were diversified in negative behaviors of guiding teachers to their students in the classroom. The preservice science teachers noticed many issues related to against the students in the classroom.

Table 1. Views, difficulties, and suggestions of preservice science teachers about traineeship experience

Themes	Categories	Codes						
Expectations	**Professional Expectations**	Contributing to my professional development	Endearing the profession	Feeling like a teacher	Applying teaching methods and techniques	Interacting with students	Getting support from the supervisor academician	Giving a lecture
Positive views	**Teaching profession**	Endearing the profession	Realized to eliminate my deficiencies	Self-confidence in becoming teacher	A love-based profession	Feeling Like A Teacher	Necessity of having conscience, patience, and tolerance	Taking Guiding Teacher As A Model
	Recognizing the school	Seeing physical conditions on site	Interpersonal interactions in school	Learning professional responsibilities and duties	Learning of working of school	Learning of school administration structure	Learning of school rules	Observing multicultural school environment
	Within-classroom observations	Establishing empathy with students	Considering of individual differences	Importance of value education	Necessity of becoming role model as a teacher	Necessity of good communication skills	Gaining classroom management skills	
Negative views	**Teaching profession**	Demoralized by school teachers	Being alienated from the profession					
	Recognizing school	Unconcerned school administration and teachers	Negative school climate	Undisciplined school organization	Witnessing to relationships based on self-interest			
	Within-classroom observations	Insulting to students	Threatening with low grade	Shouting to students	Ignoring inclusive students	Humiliation and violence to students	Giving punishment to students	Not identifying misbehaviors reasons of students
Barriers	**Traineeship school staff**	Communication problems with guiding teacher	Misbehavior of guiding teacher toward trainees	Apathy of school administration and teachers	Inadequacy of guiding teachers			
	Traineeship school environment	Crowded classrooms	Lack of materials	Transportation to the school	Bad physical conditions of the school			
Suggestions	**Traineeship duration**	Increasing traineeship period	Preferring to start traineeship earlier grade level					
	Evaluating mechanism	Trainees should evaluate guiding teacher and school	Increasing traineeship inspection by faculty	Making trainee-supportive evaluation				
	Practicing preferences	Taking more active role in traineeship applications	All theoretical lessons should be practiced in faculties					

Suggestions of preservice science teachers for traineeship

As a part of the study's scope, the preservice science teachers' suggestions were asked to them with the open-ended question "What do you suggest to improve traineeship applications". Of the responses to this question, three categories were labelled (Table 1). In terms of traineeship duration, two codes were derived which are "increasing traineeship period" and "preferring to start traineeship earlier grade level". Moreover, they recommended that "trainees should evaluate guiding teacher and school", "increasing traineeship inspection by faculty" and "making trainee-supportive evaluation" placed in evaluating mechanism category. Lastly, the preservice science teachers' responses categorized as practicing preferences within two codes which are "taking more active role in traineeship applications", "all theoretical lessons should be practiced in faculties" (Table 1). To illustrate, following responses of the participants can be seen below.

> *"I think traineeship application should be conducted in more than two semesters. Moreover, trainees' opinions about the traineeship school and guiding teacher should be considered after traineeship experience. Perhaps those data may help to train preservice teachers in a better way. For example, this suggestion may provide to work with a better guiding teacher in next semester." (Participant 3)*
>
> *"(…) I think it would be more effective to work with a guiding teacher who is a well-known, proven to be successful for traineeship." (Participant 18)*
>
> *"I want traineeship to begin in 2nd and 3rd grade. Moreover, the courses related to teaching profession in faculties should include practicing lessons to prepare us to profession life." (Participant 14)*
>
> *"In order to improve traineeship, firstly, it should begin in third year because one year [fourth year] is not enough. We [teacher candidates] should take more active roles in classrooms." (Participants 15)*
>
> *"Trainees should be inspected by the responsible academicians much more than the present. I mean that fair, real, and guiding evaluation may help to traineeship experience." (Participant 5)*

From the responses of the participants, it can be deduced that the preservice science teachers believed to start traineeship application in earlier education level and do more traineeship during their university education. Moreover, they required to develop an evaluation mechanism that they are able to evaluate their guiding teacher and school.

Discussion, Conclusion, and Implications

The present study attempted to determine preservice science teachers' opinions about traineeship applications with respect to their expectations from the training period, views on traineeship after completing the training period, difficulties encountered during the process, and their recommendation to improve traineeship applications in school experience course. Firstly, the results indicated that most of the teacher candidates' had expected the traineeship applications to contribute their professional development. For instance, they reported that they wondered how the guiding teacher manages the class against both easy and difficult situations, utilizes teaching methods and techniques, and communicates with students appropriately. Therefore, preservice teachers' expectations from the traineeship applications implies that good observations are necessary for being a good teacher since these observations give hints them about which behaviors should be exhibited in class environment for their future professional life.

On the basis of the results, some preservice science teachers' opinions about traineeship before taking the course and after the traineeship have been altered. This change was in positive way for some teacher candidates while it was negative for the rest. For instance, a participant who thought traineeship application was unnecessary at the beginning stated that s/he liked the teaching profession thanks to traineeship experience and developed confidence to become teacher. It can be concluded from here that traineeship experience provides desired self-confidence and motivation of teacher candidates to become a teacher for teaching profession. In this respect, the findings of the study seem consistent with the earlier studies (Aydın, Selçuk and Yeşilyurt, 2007; Yapıcı and Yapıcı, 2004). On the other hand, this result cannot be valid for all preservice science teachers. For instance, a participant stated that his/her negative experience throughout the traineeship led to disliking the profession, developing negative attitudes toward the profession, and bad model of the guiding teacher for the teacher candidate.

In terms of recognizing the school of preservice science teachers' experiences, they experienced to get familiar with school environment, interpersonal interactions in school, and

working of school. In this regard, it can be said that some of the purposes of traineeship were met since teacher candidates were able to experience real classroom environment, to contact directly with students, and to have idea about how a school works as parallel with the findings of Eraslan's study (2009). Furthermore, familiarization of teacher candidates with the school administration structure and school rules may facilitate their orientation to the teaching profession when they come into real professional life.

Considering the fact that classroom interaction is one of the important component in the teaching profession (Aydın, 2012), the preservice science teachers' within-classroom observations play important role in their experience during the traineeship. For example, they expressed that they experienced what they should do and should not do against various situations in the classroom on the basis of their observations through communications and interactions among the guiding teacher and the students. In fact, this interaction may help teacher candidates to establish empathy with students, understanding the importance of individual differences, and having value-oriented approach, especially to understand the multicultural classroom. Therefore, adopting these characteristics contributes to become a skillful teacher in classroom management as well as becoming a role model for their students.

Unfortunately, the teacher candidates participated to this study produced negative ideas after traineeship applications although the objective of the traineeship applications is to attain teacher candidates experience about teaching a lesson in the class, controlling the class, working of the school for their own sakes. The one of the most remarkable findings about this issue was demoralization of others teachers in the training school to trainees. The self-reports of the preservice science teachers showed that some old teachers suggested them to work in another occupation rather than teaching profession, and some complained their students to trainees as if their students are useless and desperate. The trainees stated big disappointment about the inservice teachers' attitudes and suggestions. From here, it can be understood that there are exhausted teachers, who have probably high level of burnout. To send the preservice teachers to school including such teachers affect trainees' attitudes and opinions toward teaching profession negatively. Moreover, the existence of the unconcerned school administrators and teachers, the

presence of relationships relying on self-interest, negative school climate, and undisciplined school environment led the preservice science teachers to be alienated from the teaching profession. Furthermore, the most striking findings on the negative views of preservice science teachers after traineeship were formed after their within-classroom observations. They reported that the violence, humiliations, and giving physical punishments to students affect trainees negatively and emotionally. Even though the 21st century's modern education does not confirm any kind of violence in educational settings, the existence of these situations mandatorily result in questioning whether our educational applications as modern. Especially, many preservice teachers pointed to there were ignorance and mistreatment to inclusive students in the class. They were able to realize not neglecting the inclusive students during their training period. Taking into account all of these, it is thought-provoking that the lack of the criteria in selecting the guiding teacher and training school in terms of the viewpoints toward educational and professional perspectives.

Similar to negative ideas after traineeship, preservice teachers stated that there were some barriers to experience an effective training period during the traineeship. These difficulties were categorized into two dimensions, which are namely traineeship school staff and traineeship school environment. When evaluated the opinions of preservice science teachers about traineeship applications, the most of the trainees encountered problems with their guiding teachers and school administrations. However, it was seen that they were able to take important lessons from these negative situations besides acquiring experience. According to results, teacher candidates mostly had problems with their guiding teachers. They remarked that they disturbed both the negative attitudes and behaviors of the guiding teachers towards trainees as well as inadequacy of the guiding teacher in terms of content knowledge and communication skills with trainees and students. According to them, the guiding teachers did not acknowledge the trainees as colleagues; even they threatened the trainees with giving low grades. Especially, one of the participant pointed out that his/her guiding teacher blamed him/her in front of the other teachers, and afterwards the all teachers' attitude towards trainees altered negatively. This implies that some guiding teachers could not be a good role model to preservice science

teachers, which brings to mind the same question about the absence of selection criteria of suitable guiding teacher again. These problems have similarities in Ören, Sevinç, and Erdoğmus's quantitative study (2009). Likewise, Yıldız (2006) stressed that teacher candidates were unsatisfied from their guiding teachers, and possessed negative attitudes towards guiding teachers. From here, it can be understood that the guiding teachers play important role in preservice teachers' attitudes toward the profession. Another problem which the teacher candidates faced with was the lack of interest of school administrators. Most of the participants stated that manager and assistant manager of the practice school were so unconcerned towards teacher candidates. Further, one of the participants stated that manager and assistant manager did not care about them, and remained uninterested. This situation led teacher candidates not to feel as a teacher themselves. Apart from the difficulties about the traineeship school staff, preservice science teachers stated that physical conditions of the practice school, crowdedness of the classroom, and transportation difficulties to the school were the important barriers for traineeship experience. More importantly, although the trainees were from science education, they expressed that they did not attend to any laboratory class during the whole semester. Because the laboratory works are the significant part of the science education, the traineeship applications was failed to attain experience to preservice science teachers in laboratory works in the practice schools. In order to overcome these issues, checking the laboratory and other necessary conditions of the schools gains great importance.

Within the scope of this study, the preservice science teachers suggested traineeship experience to start earlier education levels as well as increasing the duration of traineeship experience more than two semesters. In parallel with Oğuz's study (2004), the teacher candidates advised the duration of traineeship to extend as at least six semesters. Another remarkable recommendation of the participants was related to requesting evaluation mechanisms to be more effective. When considered the negative experiences and the barriers to traineeship applications, it is so likely that preservice science teachers wanted to evaluate their guiding teachers, the school administrations, and the practice school. To do this, the school experience course structure should be revised in order to increase inspection of the traineeship

processes by both the faculty staff and taking trainees' opinions into account. In addition, it can be concluded that the preservice science teachers were generally believed in the necessary and importance from the traineeship applications despite of the negative situations since they wanted to take more responsibilities in traineeship period to become more active. Lastly, they emphasized that all theoretical courses in the faculty should be practiced during their college life, suggesting that the current practicing seems to be insufficient.

To sum up, in order to make effective traineeship application for teacher candidates' sake, collaboration of school-faculty should improve; an evaluation mechanism should be prepared to assess guiding teachers and school administrators; teachers should take in-service training to cope with trainees especially for communication and becoming model for them. Moreover, control mechanisms about whether traineeship application reaches its goal rather than a procedure, which is giving a grade to teacher candidate, should be structured by increasing inspection and monitoring the stakeholders during the traineeship experience.

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