

## Research

### What Characteristics of a Student Motivate Turkish Pre-service Elementary School Teachers to Include or Not Include Students in Gifted Education Programs?

### Sınıf Öğretmeni Adayları Bir Öğrencinin Hangi Özelliklerine Bakararak Öğrencinin Üstün Zekâlı Olup Olmadığı Konusunda Karar Verir?

Omer Erdimez<sup>1</sup>

#### Abstract

The purpose of this study was to investigate Turkish pre-service elementary school teachers' reasons for including or not including a student to gifted education programs through eleven profiles (hypothetical scenarios) originally created by five American experts in the field of gifted education. The original profiles were translated and adapted to be more relevant to Turkish culture. These profiles were named "Student Profiles Survey" in this study. The profiles were varied based on characteristics embedded in each profile and I was able to create eight versions (piles) of the Student Profiles Survey. The data of this study was derived from a bigger study. Only qualitative part of the bigger data set was reported in this study. Participants of the study were 16 Turkish pre-service elementary school teachers who were attending two colleges of Education at a university located in Southeast of Turkey. After filling the survey, Turkish pre-service teachers were interviewed to explain their reasons to include/ not include the students in the survey to gifted education programs. Turkish pre-service elementary school teachers explained their reasons for including the students in the profiles to gifted education programs mostly based on the personal, academic, and social characteristics of the students embedded in the profiles but they did not often referred students' characteristics when they were explaining their reasons for exclusion. Rather than explaining their reasons based on characteristics of the students, Turkish pre-service teachers increased their expectations and created excuses to underestimate the potentials of the students in the profiles when they were asked to explain their reasons for exclusion.

**Key Words:** Turkish pre-service teachers, gifted, gifted characteristics

#### Öz

Bu çalışmanın amacı, sınıf öğretmeni adaylarının öğrencileri üstün zekâlılar programına dâhil edip etmeme nedenlerini belirlemektir. Çalışmada kullanılan veri toplama aracı, üstün zekâlılar alanında uzman beş Amerikalı tarafından hazırlanmış olan ve hayali üstün zekâlı öğrencileri tanıtan bir anketir. "Öğrenci Profilleri Anketi" olarak adlandırılan anketteki on bir hayali öğrenciyi tanıtan senaryolar araştırmacı tarafından İngilizceden Türkçeye çevrilip uyarlanmıştır. Öğrencilerin farklı özellikleri dikkate alınarak kurgulanan, hazırlanan hayali senaryolar, sekiz farklı Öğrenci Profilleri Anketi'nin oluşmasını sağlamıştır. Bu çalışmada kullanılan veriler ise daha kapsamlı bir çalışmadan elde edilen verilerin sadece nitel kısmını oluşturmaktadır. Çalışmanın katılımcıları Türkiye'nin güneydoğusunda yer alan büyük bir üniversitenin sınıf öğretmenliği programına devam eden 3 ve 4. Sınıf öğrencileridir. Anketi dolduran öğretmen adayları ile görüşmeler yapılmış ve ankette yer alan hayali öğrencileri üstün zekâlılar programına dâhil edip etmeme nedenleri sorulmuştur. Sınıf öğretmeni adayları, senaryolarda yer alan öğrencileri üstün zekâlılar programlarına dâhil etme sebeplerini açıklarken genelde öğrencilerin kişisel, akademik ve sosyal özelliklerine vurgu yaparken dâhil etmeme sebeplerini açıklarken bu özellikleri göz ardı ettikleri gözlemlenmiştir. Öğretmen adayları dâhil etmeme nedenlerini açıklarken öğrenci özelliklerine vurgu yapmak yerine bahaneler üretmiş, öğrenciden yana beklentilerini yükseltmiş ve bu öğrencilerin var olan potansiyellerini hafife alarak bu öğrencileri üstün zekâlılar programına dâhil etmeyeceklerini beyan etmişlerdir.

**Anahtar Sözcükler:** Sınıf öğretmeni adayları, üstün zekâlı öğrenciler, üstün zekâlı öğrenci özellikleri.

*This study is a part of the dissertation of the researcher, which was submitted to the University of Arizona Graduate College for his PhD degree in Educational Psychology, in May 2017.*

<sup>1</sup>Corresponding author, Assist. Prof., Adiyaman University, Department of Special Education, Adiyaman, Turkey; oerdimez@adiyaman.edu.tr, ORCID: 0000-0002-5223-7953

## Introduction

Teachers play an important role regarding referral of students to gifted education programs. Most gifted referrals are made by teachers (Davis & Rimm, 2004; Hallahan, Kaufmann, & Pullen, 2009). Because of teachers' crucial role at identification process, their perceptions, knowledge, and levels of understanding of gifted students' characteristics become very important. Teachers' shortcomings about gifted students' characteristics and their misperceptions about gifted students might lead to fallacious referrals. As a result of lack of knowledge about gifted students and misperceptions about these students, teachers might nominate non-gifted students or fail to nominate students who are indeed gifted but who do not meet the criteria that teachers believe represent the characteristics of gifted students (Erdimez, 2017).

Previous research has shown that some teacher level and student level factors might affect the referral process. Student level factors are: students' cultural and ethnic backgrounds (Elhoweris, Mutua, Alsheikh, & Holoway, 2005; Grantham, 2002; McBee, 2010), students' personality traits (Alvidrez & Weinstein, 1999; Endepohls-Ulpe & Ruf, 2005; Erdimez, 2017; Hunsaker, 1994; Persson, 1998; Siegle, Moore, Mann, & Wilson, 2010), students' socio-economic status (Van Tassel-Baska, Patton, & Prillaman, 1991), students' ages (Siegle et al., 2010), and the twice-exceptionality of students (Bianco & Leech, 2010). Teacher level factors are: teachers' gender bias (Bianco, Harris, Garrison-Wade, & Leech, 2011; Erdimez, 2017; Siegle & Reis, 1998), teachers' gender (Erdimez, 2017), the gifted status of teachers (Bégin & Gagné, 1994; Michener, 1980), teachers' knowledge of giftedness (Bianco & Leech, 2010; Morris, 1987), teachers' stereotypical views (Erdimez, 2017; Grantham, 2002; Miller, 2009; Peterson & Margolin, 1997; Powell & Siegle, 2000), and words describing students (Erdimez, 2017; Siegle et al., 2010).

As stated by Siegle (2001), not only aforementioned factors but also teachers' their beliefs, biases, attitudes, expectations and perceptions can impact their referral decisions. Because of these reasons, when investigating teachers' reasons of referral, any factors that constitute the identity of teachers such as; the knowledge, culture, beliefs, biases, attitudes, and perceptions should be taken into consideration. The questions such as; "How do teachers perceive the giftedness? What lenses do they use to perceive the characteristics of a gifted student? Do their culture and knowledge impact their perceptions of giftedness?" have substantial importance to better investigate and understand a teacher's perception of giftedness. In this study, Turkish pre-service elementary school teachers' perceptions of giftedness were investigated through hypothetical scenarios. Before reviewing studies focusing on perceptions of Turkish teachers, it might be beneficial to review studies related to Turkish teachers' knowledge of giftedness to better understand their perceptions of giftedness.

### Turkish Pre-service and in-service Teachers' Knowledge of Giftedness

The number of studies focusing on Turkish Pre-service and in-service teachers' knowledge of giftedness is limited (Demirhan, Uyanik, Güngören, & Erdoğan, 2016; Inan, Bayindir, & Demir, 2009; Gökdere & Ayvaci, 2004). In this section, it will be explained to what extent that Turkish teachers are trained or knowledgeable about gifted students and their characteristics.

In a recent study, Demirhan, Uyanık, Güngören and Erdoğan (2016) surveyed 193 Turkish university websites to determine to what extent the subject “gifted student” is included in the teaching plan of elementary school teaching programs. The authors of the study found that 70 universities had an elementary school teaching program and among those universities, 68 of them offered a special education course in which the subject “gifted student” was covered. When they investigated the special education course content and objectives, the authors found that objectives concerning “gifted student” take the last place among objectives of this course, and that objectives focusing on characteristics of gifted students come across as one of the least addressed objectives in the special education course. In addition, Demirhan et al. (2016) reported that only four colleges of education in Turkey offer an elective course that covers topics about gifted students and their characteristics. The findings of this study indicate that elementary school teacher programs in Turkey do not provide enough training for pre-service teachers to recognize and educate gifted students.

The knowledge of in-service teachers regarding gifted students and their characteristics is not different from pre-service teachers. To determine in-service teachers’ awareness about characteristics of gifted individuals, Inan, Bayindir and Demir (2009) developed and administered a survey to 75 in-service teachers who were working in one of the cities of Turkey. In-service teachers stated their agreement or disagreement to 30 items regarding describing the characteristics of the gifted individuals. The authors of the study concluded that in-service teachers were confused about the characteristics of a gifted individual and a successful student. The authors claimed that this confusion stems from their shortcomings about recognizing the characteristics of gifted individuals.

Another study that focused on in-service elementary school teachers’ knowledge of giftedness and the characteristics of gifted students revealed that in-service elementary school teachers do not have enough knowledge to recognize gifted students based on their responses to the questionnaire developed by the researchers (Gökdere & Ayyacı, 2004). In-service elementary school teachers’ responses to interview questions also revealed that most of the teachers define gifted students with the characteristics of successful students. Results of the above-mentioned studies indicate that colleges of education in Turkey do not provide enough training for pre-service teachers to recognize gifted students and their characteristics. Teachers’ lack of training about gifted students and their characteristics jeopardizes potential gifted students’ education and futures. As a result, pre-service teachers’ knowledge and perception of giftedness have become very important.

### **Turkish In-service and Pre-service Teachers’ Perceptions of Giftedness**

Similar to studies focusing on Turkish pre-service and in-service teachers’ knowledge of giftedness, the number of studies focusing on Turkish pre-service and in-service teachers’ perceptions of giftedness is limited (Akar&Akar, 2012; Çapan, 2010; Özsoy, 2014; Tezcan, 2012). When investigating these studies, one can see that one of these studies was about pre-service teachers’ perceptions of giftedness (Çapan, 2010) and the other three were about in-service teachers’ perceptions of giftedness (Akar&Akar, 2012; Özsoy, 2014; Tezcan, 2012). Although all four studies used

qualitative methods to investigate pre-service and in-service teachers' perceptions of giftedness, two of the studies used metaphorical representations, words or objects used to describe something (Çapan, 2010; Özsoy, 2014) and the other two studies used semi-structured interviews to collect the data.

Çapan's (2010) study about Turkish pre-service teachers' perceptions of gifted students was the first to use metaphors to detect those perceptions. The study participants consisted of 211 pre-service teachers enrolled in nine different programs of a college of education at an established university. Çapan (2010) gave pre-service teachers the following statement and asked them to fill in the blank spaces: 'A gifted student is like / resembles ....., because.....' Pre-service teachers created 128 different metaphors, which were classified under 13 categories/themes. The most frequently used metaphors were valuable mineral, computer, fertile land and diamond. The author of the study concluded that, generally, pre-service teachers were able to describe gifted students and their characteristics, but pre-service teachers' lack of knowledge about how to educate those students made pre-service teachers think that gifted students would not perform at a level appropriate to their potentials.

The second metaphoric study about perceptions of giftedness was conducted with 75 students, teachers and parents of students who were attending a Science and Art Center, a state after-school program designed for gifted students (Özsoy, 2014). The participants of the study created 75 different metaphors to describe the gifted student. Diamond, light and tree were the most frequently used metaphors to describe the gifted student. Seven categories/themes were created based on metaphors created by participants of the study. The author of the study concluded that students', teachers' and parents' metaphors were homogenous. "The person who is different than his/her peers" was the category/theme, which consisted of the highest number of metaphors (18). Although the author of the study claimed that the participants were able to recognize gifted students, the category/theme that consisted of the highest number of metaphors showed ambiguity. The participants of the study describe a gifted student as "someone who is different from his/her peers," but they did not explain how or in what way the gifted student is different from his/her peers. The ambiguity might have been as a result of participants' lack of knowledge about the characteristics of gifted students. The biggest limitation of Özsoy's (2014) and Çapan's (2012) studies were related to collection of the data. Using only metaphors to detect pre-service teachers' perceptions of giftedness might not provide a broad picture about these teachers' perceptions and knowledge level of giftedness.

In another study, Akar and Akar (2012) investigated in-service teachers' perceptions of giftedness through semi-structured interviews. The study consisted of 155 in-service teachers who were working for public schools in one of the cities of Turkey. Among those teachers, 88 of them were elementary school teachers and the rest of them were teachers of different subject areas. The researchers asked in-service teachers how they define giftedness and what the characteristics of gifted individuals are. In-service teachers defined giftedness as follows: having a gift or talent, having different characteristics, being successful and having high IQ or intelligence. In-service teachers' ideas about characteristics of gifted students were categorized under 9 themes. The first five themes were categorized as positive characteristics and the last four were categorized as

negative characteristics of gifted students by the researchers: being different, curious, creative, successful, having high communication skills, asocial, having behavior problems, hyper-active, and bored. The researchers concluded that Turkish in-service teachers did not have enough knowledge about giftedness and were not able to differentiate the gifted student from the successful one. This study also emphasizes the importance of a teachers' knowledge level of giftedness. Pre-service and in-service teachers should receive some training or take some courses to better recognize the gifted students.

The last study about in-service teachers' perceptions of giftedness was different from previous studies mentioned in this section based on the results of the study (Tezcan, 2012). The study's participants were 15 early childhood teachers; 5 of them working for public schools and 10 of them for private schools. The researcher used semi-structured interviews to detect early childhood teachers' perceptions towards gifted children and their education. The author of the study concluded that early childhood teachers consistently perceived and defined giftedness as a concept based on excellence in cognitive abilities. Although the other perception studies found that pre-service and in-service Turkish teachers did not have enough knowledge to recognize gifted students and their characteristics, in Tezcan's (2012) study, pre-service teachers were able to recognize gifted students and their characteristics based on excellence in cognitive abilities. The difference between Tezcan's (2012) study and other perception studies can be better explained when investigating educational backgrounds of early childhood teachers who participated in that study. All 15 early childhood teachers at least took a course about gifted education during their undergraduate or graduate education; 4 of them took in-service training about gifted education and 5 of them took at least a seminar about gifted education.

Based on the findings of the studies focusing on Turkish in-service and pre-service teachers' perceptions of giftedness, first of all, we can conclude that pre-service teachers, especially pre-service elementary school teachers, do not receive enough training about gifted students, their characteristics and education at colleges of education in Turkey (Demirhan et. al., 2016; Gökdere & Ayvaci, 2004; Inan, Bayindir, & Demir, 2009). Second, pre-service and in-service teachers' perceptions of giftedness were negatively affected by those teachers' lack of knowledge about gifted students and their characteristics (Akar & Akar, 2012; Çapan 2010; Özsoy, 2014). Third, the number of studies focusing on pre-service and in-service teachers' perceptions of giftedness is limited (Akar & Akar, 2012; Çapan, 2010; Özsoy, 2014; Tezcan, 2012). More studies are needed to better understand pre-service and in-service teachers' perceptions of giftedness and what factors motivate them to nominate students to gifted education programs. Last, teachers' knowledge about gifted students and their characteristics positively affect their perceptions of giftedness and ability to recognize these students (Tezcan, 2012).

### **Purpose and Rationale**

In this study, I used the student profiles created by Siegle et al. (2010) and a follow up interview to investigate reasons of Turkish pre-service teachers to include/ not include students in the profiles to gifted education programs. The reasons of pre-service teachers to include or not include a hypothetical student to gifted education programs might provide characteristics that pre-service

teachers associate with giftedness. Because pre-service elementary school teachers have the highest possibility of attending some classes about gifted students and most of the gifted referrals occur during elementary school years (McBee, 2006), pre-service elementary school teachers were selected for this study to investigate reasons motivated them to include/ not include a student to gifted education programs. Because teachers' knowledge about gifted students and their characteristics positively affect their perceptions of giftedness and ability to recognize these students, teachers' knowledge level of giftedness also investigated through their credentials in gifted education. The following question guided the study:

### Research Question:

1. What were Turkish pre-service teachers' reasons to include/not include the students in the profiles to gifted education programs?

## Method

### Research Design

This study has a *qualitative research design* (Creswell, 2014) to detect Turkish pre-service elementary school teachers' reasons for nominating or not nominating students to gifted education programs. Turkish pre-service elementary school teachers were interviewed to explain their reasons for including or excluding students in the profiles to/from gifted education programs. Semi-structured interview questions (see Appendix A) were used to detect the reasons of inclusion or exclusion.

### Settings and Participants

Junior and senior Turkish pre-service elementary school teachers who were attending two different colleges at Gaziantep University, Gaziantep College of Education and Nizip College of Education, were recruited for this study. A total of 16 pre-service elementary school teachers from the two colleges of education accepted to participate in the study. To be able to create a representative sample of pre-service teachers, at least two pre-service teachers who rated the same profiles were asked for interviews. The number of junior and senior students who volunteered for interviews from both colleges was equal. I was able to verify gifted status of one pre-service teacher and interviewed her. Information about interviewees' gender, affiliation, gifted status, and cohort is provided in Table 1.

**Table 1. Information about Interviewees' Gender, Affiliation, Cohort, and Gifted Status**

| Colleges  | Gender |        | Cohort  |         | Gifted Status |    |
|-----------|--------|--------|---------|---------|---------------|----|
|           | Male   | Female | Juniors | Seniors | Yes           | No |
| Gaziantep | 3      | 5      | 4       | 4       | 1             | 7  |
| Nizip     | 3      | 5      | 4       | 4       | 0             | 8  |
| Total     | 6      | 10     | 8       | 8       | 1             | 15 |

### Instruments

To investigate what characteristics of hypothetical students motivated Turkish pre-service ele-

mentary school teachers to include or not include these students to gifted education programs, I used Student Pro-files Survey (Appendix A) created by Siegle et al. (2010) and interview questions (Appendix B). To investigate whether taking some courses related to gifted education affects Turkish pre-service elementary school teachers' perceptions of giftedness, these students' credentials in gifted education used as an independent variable in this study.

**Student profiles survey.** Siegle et al. (2010) developed the Student Profiles Survey based on their own experiences in gifted and talented programs or on characteristics that the research literature indicated to influence students' selection for gifted and talented programs. In total, 11 different profiles were created and the gifted student described in each profile had different characteristics (Siegle et al., 2010). Although 11 different profiles were created, they differed from one another due to the characteristics embedded in each profile.

The original profiles were translated and adopted to be more relevant to Turkish Culture. All of the profiles are presented in Appendix A and the characteristic variations are indicated in parenthesis at the top of each profile. Moreover, Table 2 provides the variables embedded in each profile. As can be seen in the table below, the profiles included several variables, including but not limited to gender, grade level, presence of ability, outside area of passion, length of passion, organizational ability, and so forth. Based on these variables, 64 different profiles were created in total.

**Table 2. Variables Embedded in Student Profiles Survey**

| Profiles | Variables   |
|----------|---|
| P1       | Gender: Kadir/Keriman<br>School Subject Interest: Turkish/Life Sciences/Math/Science                        |
| P2       | Gender: (Betul/Bilal)<br>Grade Level: First/Second/Third/Fourth)  |
| P3       | Gender: Melek/Mustafa<br>Presence of Ability: In Reading/In Math  |
| P4       | Gender: Demet/Davut<br>Outside Area of Passion: Dogs/Eagles<br>Length of Passion: Kindergarten/Second Grade |
| P5       | Gender: Sami/Selma<br>Organizational Ability  |
| P6       | Gender: Necip/Nalan<br>Area of Ability: Math/Reading<br>Assertiveness                                       |
| P7       | Gender: Gulay/Galip<br>Attention  |
| P8       | Gender: Leyla/ Lokman<br>Control Over Students  |
| P9       | Gender: Ertan/Eylul<br>Emotion  |
| P10      | Gender: Cemal/Canan<br>Relationship with Classmates   |
| P11      | Socio-economic Status<br>Family History in Gifted Programs  |

**Interview questions.** These questions helped me to investigate what characteristics of hypothetical students motivated Turkish pre-service elementary school teachers to refer or not refer

these students to gifted education programs (see Appendix B). Using these questions, characteristics of student associated with giftedness were determined and investigated in depth.

### **Procedures**

After receiving the site authorization from Gaziantep University, I was able to conduct my research by using my personal networks at both colleges. The announcement of the study was made in the classes of the colleges of education. The lay summary of the study was delivered to the students. The students who agreed to take part in the study received the consent form of the study and Student Profiles Survey. The students were asked to fill out and bring back the survey to the class the following week. In the next four weeks, I visited the two colleges to gather the surveys and make interviews with students who volunteered.

### **Reliability/ Validity Issues**

I coded qualitative data gathered through the interviews along with a doctoral student who had expertise in qualitative analysis. To calculate inter-coder agreement, two of the sixteen interviews were coded separately by me and the doctoral student. The inter-coder agreement was calculated by using Cohen's Kappa (Cohen, 1960). The inter-coder agreement between two coders was at a moderate level ( $\kappa = .404$ ,  $P < .001$ ). After ensuring a moderate agreement between two coders, I coded the rest of the interviews.

### **Data Analysis**

To detect Turkish pre-service elementary school teachers' reasons to include or exclude the students in the profiles in the gifted education program, their responses to interview questions were analyzed by employing the Grounded Theory (Glaser & Strauss, 1967). By using this method, the pre-service teachers' responses were coded, compared and categorized. Open, axial, and selective coding were used to create the main themes in the responses of the pre-service teachers.

## **Findings**

### **Research Question: What were Turkish pre-service teachers' reasons to include/ not include the students in the profiles in/from gifted education programs?**

To determine Turkish pre-service elementary school teachers' reasons for inclusion or exclusion of the students in the profiles, the pre-service teachers' responses to interview questions were coded for qualitative analyses. Interview questions aimed to investigate pre-service teachers' reasons for their ratings on the Students Profile Survey. As seen in Appendix B, interview questions focused on reasons of inclusion or exclusion and detecting characteristics of the students, which motivated pre-service teachers to include or exclude these students in or from gifted programs. Pre-service teachers explained their reasons for inclusion or exclusion based on characteristics of the students in the profiles. This was more common among inclusion codes. As mentioned before, pre-service teachers' knowledge level of giftedness was the independent variable of this study. Because none of the pre-sevice teachers took any classes related to gifted education, I was not able to investigate how pre-service teachers' knowledge level affected their perceptions

of giftedness. Only pre-service teachers' reasons of inclusion and exclusion were reported without any comparisons.

The reasons to "definitely include" and "definitely not include" combined under opposite categories: inclusion and exclusion codes. For the responses of "include with reservations", inclusion reasons added to inclusion codes and explanations for "reservations" added to exclusion codes. For the responses of "not include with reservation", reasons for non-inclusion added to the exclusion category and reasons for "reservations" added to the inclusion category. In responses with "reservations", pre-service teachers usually described characteristics opposite of the first part of their response. Because of that reason, the codes for the first part of responses with reservations added one category and the codes for the "reservations" part went under the opposite category.

### Reasons for Inclusion

When Turkish pre-service elementary school teachers were asked why they would include the students in the profiles for gifted education programs, they mostly explained their reasons of inclusion based on the characteristics of the students in the profiles. Based on the pre-service teachers' responses to interview questions, 49 different inclusion codes with a total frequency of 307 were created for inclusion category. The inclusion codes were categorized under five themes: academic characteristics, cognitive characteristics, personal characteristics, social-emotional characteristics and controversial issues in gifted education (see Table 3). As seen in Table 3, Turkish pre-service teachers explained their reasons of inclusion mostly based on academic and personal characteristics of these students. Twenty six different codes with total frequency of 222 were under these two categories. The frequencies of codes under the Cognitive Characteristics theme and Social-emotional theme were very close to each other and controversial issues in gifted education had the lowest number of codes and frequency.

**Academic characteristics.** Turkish pre-service teachers often referred to academic characteristics of the students in the profiles when explaining their reasons of inclusion. In total, 11 different codes were created under this theme. Reading skills /achievement, academic achievement, mathematical skills/achievement and large vocabulary were some of the codes with the highest frequencies (see Table 3). Pre-service teachers more often referred to academic characteristics of the students in the profiles while explaining their reasons of inclusion. For instance, a pre-service teacher (P5011) explained her reasons of including Melek, the female student who is introduced as an avid reader and who understands math concepts quickly in Profile 3, as follows:

*"I rated this one as definitely include. I have looked at characteristics of Melek. In general, gifted students' verbal abilities are advanced. They are people who like to talk and discuss. And If Melek is a talkative person then ... she also has a large vocabulary and plays with words. Then, I would like to include this student to the special education program. I mean special education program for gifted kids, because she reads books which are above her peers' level, the books which are not appropriate for her age. She reads those because she comprehends them. She even comprehends mathematical concepts in a faster way".*

Another pre-service teacher responded to the question of why she would include Nalan, a female student who was assertive and had excellent math abilities as introduced in Profile 6, to the gifted education program based on academic characteristics of this student;

*“Because she has excellent mathematical skills. For me, mathematical abilities can be counted as problem solving abilities. She is also organized and this is important for me. I believe gifted persons will be organized in every task. Expressing ideas in an appropriate way is also important. Because of these reasons, I would include her...”*

**Table 3. Inclusion Themes and Codes**

| <b>Personal Characteristics</b>                | <b>f(115)</b> | <b>Academic Characteristics</b>                      | <b>f(107)</b> |
|--|---------------|--|---------------|
| Being curious                                  | 33            | Reading skills/achievement                           | 24            |
| Desire to learn in-depth                       | 10            | Academic achievement                                 | 20            |
| Desire to share the knowledge                  | 9             | Mathematical skills/achievement                      | 18            |
| Searcher/researcher                            | 9             | Large vocabulary                                     | 10            |
| Watching the Science Channel                   | 8             | Excel in writing                                     | 9             |
| Passion  | 8             | Playing with words                                   | 7             |
| Interest in more than one area/different areas | 8             | Creative story writing                               | 6             |
| Talkative/ verbal abilities                    | 6             | Getting good grades                                  | 5             |
| Humor  | 6             | Neat schoolwork                                      | 4             |
| Critical/Questioning                           | 5             | Active class participation                           | 3             |
| Asking thoughtful questions                    | 5             | Making connections with course                       | 1             |
| Having more than one characteristics           | 3             |  |               |
| Organized                                      | 3             |  |               |
| Loving discussions                             | 1             |  |               |
| Prone to study                                 | 1             |  |               |
| <b>Cognitive Characteristics</b>               | <b>f(31)</b>  | <b>Controversial Issues in Gifted Education</b>      | <b>f(19)</b>  |
| Recall abilities                               | 6             | Multiple Intelligence/types of intelligence          | 8             |
| Memorization skills                            | 6             | Effects of nature/ Family History in Gifted Programs | 6             |
| Ability to solve problems                      | 6             | Socio-economic status                                | 3             |
| Making connections between events/thoughts     | 5             | Effects of nurture                                   | 2             |
| Fast thinking /comprehension                   | 4             |  |               |
| Thinking more than one thing at the same time  | 3             |  |               |
| Imagination                                    | 1             |  |               |
| <b>Social-Emotional Characteristics</b>        | <b>f(35)</b>  |  |               |
| Self-confidence                                | 6             |  |               |
| Dominant                                       | 5             |  |               |
| Socialization with elders                      | 4             |  |               |
| Helping others                                 | 3             |  |               |
| Leadership                                     | 3             |  |               |
| Preoccupied                                    | 3             |  |               |
| Being approved by others                       | 3             |  |               |
| Empathic                                       | 3             |  |               |
| Emotional                                      | 2             |  |               |
| Organization skills                            | 1             |  |               |
| Knows and Fells Bored                          | 1             |  |               |
| Introspective                                  | 1             |  |               |

**Cognitive characteristics.** This theme had six different codes with a total frequency of 31. Recall abilities, memorization skills, ability to solve problems, making connections between events/thoughts, fast thinking/comprehension, and imagination were the codes of this theme. Turkish pre-service teachers did not often refer to the cognitive characteristics of the students in the profiles when explaining their reasons for inclusion.

One of the Turkish pre-service elementary school teachers (P5033) explained her reasons for inclusion of Leyla, a female student who is good at recall abilities and a who has a dominant personality as explained in Profile 8, to gifted education programs based on her recall abilities;

*“Here, I would include her because she has excellent recall abilities and writing skills [Burada da kompozisyon yazması ve bilgileri hatırlaması konusunda çok mükemmel becerilere sahip olduğui içinde hilederim]”*

Another pre-service teacher (P4013) referred to the problem solving abilities of Selma, an unorganized bright female student who loves to learn as described in Profile 5, when explaining her reasons of inclusion;

*"Because she is social, has excellent problem solving abilities and has a desire to read"*

**Personal characteristics.** Turkish pre-service teachers mostly referred to the personal characteristics of the students in the profiles when explaining their reasons for inclusion. This theme had the highest number of codes and frequency (see Table 3). Being curious, desire to learn and desire to share knowledge were some of the codes under this theme. The code of being curious had the highest frequency. Being curious was mentioned 33 times in responses of pre-service teachers when explaining their reasons for inclusion.

A male pre-service teacher explained his reasons for including Azra, a bright high SES female student who lives with her parents as described in Profile 11, based on her curiosity;

*"I would include with reservations.... The reasons of inclusion are her high achievement and curiosity. We see a curious person; curiosity means a person who is questioning and searching"*

A female pre-service teacher (P5033) referred to another code created under personal characteristics of the student when explaining her reasons of inclusion, sharing knowledge;

*"It is stated in the profile that he tries to interrupt the teacher and shares the things he learned through readings. This means...This made me to include him"*

**Social-emotional characteristics.** Although 12 codes were created under this theme, the total frequency of these codes was 35. Turkish pre-service teachers did not very often refer to social-emotional characteristics of the students in the profiles. Self-confidence, socialization with elders and helping others were some of the codes under this theme.

A male pre-service teacher referred to self-confidence and being dominant when he explains his reasons for including Nalan, a voracious female fifth grader who has self-confidence in expressing her ideas;

*"What I understand here is that Nalan is really curious and has a desire, which took her to success. And also she expresses her ideas fearlessly. This means she has a high self-confidence. A person who is self-confident trusts their own self and own knowledge. She even convinced her parents to make a fish pond in their backyard. She is that much a dominant character. In my eyes, dominant characters are among gifted people. Because of these reasons, I would include her."*

A female pre-service teacher also referred to social-emotional characteristics of gifted students when explaining her reasons for inclusion. When she was asked for reasons of including Keriman, a quiet and introspective student who is interested in Turkish, she explained the reason as follows:

*"For instance, she does not talk with her friends. May be she does not like what her friends talk about or these things are not appropriate to her level. She more prefers to talk with her teachers. She prefers to walk alone during break or talking with her teachers."*

**Controversial issues in gifted education.** Turkish pre-service teachers rarely referred to the controversial issues in gifted education. The codes in this theme referred to ongoing discussions in gifted education such as nature vs. nurture (Yun Dai & Coleman, 2005), effects of socio-economic status on intelligence, and multiple vs. general intelligence (Waterhouse, 2006); because of this reason, these codes were combined under the theme of controversial issues in gifted education. Only four different codes were under this theme. Total frequencies of all four codes were 19. Multiple intelligences/types of intelligence, socio-economic status, effects of nurture and effects of nature/family history in gifted education were the codes of this theme.

Two pre-service teachers, P1002 and P7010, referred to two different codes of this theme, effects of nature/family history in gifted education and emotional intelligence/ types of intelligence, when they were asked to explain their reasons for including Azra (Profile 11.2) and Eylül (Profile 9.7), respectively;

*“It might be genetics because she has a gifted brother. In addition, she shows high achievement and watches the science channel although she is a second grader.”*

*“I would definitely include her. She has excellent reading skills. She is a highly sensitive young woman who reacts with strong emotions. I think this shows that she has an emotional intelligence which is at a high level.”*

### **Reasons for Exclusion**

When Turkish pre-service elementary school teachers were asked why they would not include the student in the profile to gifted education programs, they mostly explained their reasons of exclusion not based on the characteristics of the student in the profile, but based on excuses and explanations that underestimate the potential of the students in the profiles. Although four out of five themes in this category focused on characteristics of the students, the fifth theme, which was labeled as extra-ordinary expectation and underestimating the potential, had a total frequency of 78, which was more than the sum of the frequencies in the other four themes. The other four themes were academic characteristics, cognitive characteristics, personal characteristics and social-emotional characteristics (see Table 4).

**Extraordinary expectation and underestimating the potential.** The total frequencies of codes under this theme were higher than the total frequency of all of the other themes of exclusion. There were 11 different codes with a frequency of 78. Pre-service teachers, rather than focusing on characteristics of students, explained their reasons of exclusion mostly based on the codes in this theme. Normal / average student, interest into only one area, bright but not gifted and curious but not gifted were some of the codes of this theme. The codes in this theme showed that pre-service teachers have extra-ordinary expectations as it relates to including a student in a gifted program. The students without these skills or abilities were not perceived as gifted.

A female pre-service teacher (P1002) explained her reasons for not including Demet, a female fourth grader who has been passionate about eagles since second grade, to the gifted education program, referring her interest into only one area:

*"I did not see anything here. She is just doing something about eagles. Her only interest area is eagles and nothing more. In my opinion, gifted people progress faster and should be more assertive..... I would have included her if she was interested in science-fiction but she only has an interest in eagles and I think she has visually something different..."*

Another female pre-service teacher (P2016) also explained her reasons for not including Bilal, a second grader who is an active class participant, to the gifted education program. She expressed her extra-ordinary expectation from a gifted student with following sentences:

*"I did not add Bilal to that category because being good at one area does not make you gifted. For instance, are all painters gifted? Painters do good paintings. Or a very good teacher is gifted? Being good at one thing does not make you gifted. It should be in more than one area and this achievement should be demonstrated internationally. For instance, I read news about a 12 years old Chinese student who was found cognitively at a university student level. He knows many languages. This is a scary brain. For me, this student is gifted. This is my opinion."*

**Table 4. Exclusion Themes and Codes**

| <b>Extra Ordinary Expectation / Underestimating the Potential</b> | <b>f(78)</b> | <b>Social-Emotional Characteristics</b>   | <b>f(41)</b> |
|---|--------------|---|--------------|
| Normal /average student   | 27           | Emotional/ cry easily                     | 10           |
| Interest into only one area                                       | 17           | Do not have self-confidence               | 7            |
| Bright but not gifted   | 12           | Disruptiveness/ negative behaviours       | 6            |
| Interest not intelligence   | 7            | Introspective                             | 5            |
| Extraordinary expectation   | 5            | Dominant                                  | 5            |
| Being good at in only one area /intelligence type                 | 3            | Not respecting others' ideas              | 2            |
| Curious but not gifted  | 3            | Not being approved by others              | 1            |
| Expecting achievement in more than one area                       | 2            | Not being able to reflect his personality | 1            |
| Nurture not intelligence  | 1            | Not being able to prove him/herself       | 1            |
| High SES  | 1            | Being affected by others                  | 1            |
|   |              | Preoccupied                               | 1            |
|   |              | Getting angry                             | 1            |
| <b>Cognitive Characteristics</b>                                  | <b>f(13)</b> | <b>Academic Characteristics</b>           | <b>f(4)</b>  |
| Not to remember/Forget  | 8            | Fall behind friends                       | 2            |
| Attention deficit   | 1            | Not writing down the thoughts             | 1            |
| Not being able to make connections between thoughts               | 1            | Not in the top 10 percentile              | 1            |
| Memorization/not a creative thought                               | 3            |   |              |
| <b>Personal Characteristics</b>                                   | <b>f(18)</b> |   |              |
| Switching tasks without completion                                | 6            |   |              |
| Strange humor   | 4            |   |              |
| Making comments not related to the topic                          | 3            |   |              |
| Not interested in science-fiction                                 | 3            |   |              |
| Not organized   | 2            |   |              |
| Introspective   | 1            |   |              |

**Social-emotional characteristics.** Turkish pre-service teachers more often referred to the social-emotional characteristics of the students in the profiles when explaining their reasons for exclusion. Twelve different codes were created under this theme. This theme had the second highest number of codes among exclusion themes. Emotional /cry easily, do not have self-confidence, disruptiveness/negative behaviors and introspective were some of the codes of this theme.

One of the pre-service teachers (P4013) explained Eylül's emotional and easy to cry personality as a reason for not including her:

*“Her reading skills are good but... It is stated that Eylul is immature for her age and cries easily when she doesn't get her own way. This is the reason why I did not include her”*

Another pre-service teacher (P3004) also referred to social-emotional characteristics of Necip (Profile 6) and explained his reasons of exclusion based on his self-confidence:

*“He is also like Demet. Demet had an interest in dogs. Necip has an interest in fishes and only in fishes. Actually this is good from one perspective, but we cannot say it is very good. I think he is at an average student level. He is a successful student who does his homework. Since he believed that others' ideas are superior from his ideas, I mean, since he could not express his ideas very well, he accepted others' ideas. I think a gifted student should always insist on ideas he/she has. They should not give up easily.”*

**Personal characteristics.** Switching tasks without completion, strange humor, making comments not related to the topic, not interested in science fiction and not organized were five codes of this theme. These codes were mentioned 18 times by pre-service teachers when explaining their reasons for exclusion. A male pre-service teacher referred to humor skills of Melek, a verbal female student who has a large vocabulary and enjoys playing with words, when explaining his reason to not to include her in the gifted education program with the following statement:

*“Why I would not include this student? Ok. This student is talkative but there is a lot of unnecessary information given to students. For me, intelligence is very important in humor. As I see, her humor is not appreciated by people around her. If she wants her humor to be appreciated by others, she should use the information she obtained in a nice and clever way. Since she did not use that way, it does not mean anything. Although at the end it is stated that Melek turns in her assignments on time and has quality ranging from assignment to assignment, most things are negative here.”*

Another pre-service teacher (P5033) also referred to ‘switching tasks without completion’, a personal characteristic, when explaining her reasons of exclusion. She stated that Gülay, a lively fourth grade student who has a passion for whales, should not be included in the gifted education program because of this characteristic:

*“Because, she is always pre-occupied. I underlined that part. It is also stated in the profile that Gülay's interest in different areas makes her switch tasks without completion. This means she does not complete tasks. This causes me to not include her. Maybe a topic did not attract her but.... For example scientists work for years, even some of them spend their life for a passion. Why they do not quit? It should not be quitted”*

**Cognitive characteristics.** Not to remember / forget, attention deficit, not being able to make connection between events and thoughts and memorization / not creative thought were the codes of this theme. These codes were mentioned 13 times by Turkish pre-service teachers when explaining their reasons of exclusion. A female pre-service teacher (P5033) stated that not to remember /forget was a reason for her to not to include Keriman, a quiet and introspective student who gets lost in thought and frequently has no idea what was just said, to gifted education program:

*“Why I would not include her? It is stated that her comments are not related to the topic and she is lost among thoughts and does not remember what was said although she knows the topic. First of all, she is*

*forgetful and does not remember what she has been doing and talks off topic. Although she is an organized student, this is not enough to be gifted. I would not include her"*

**Academic characteristics.** Turkish pre-service elementary school teachers rarely referred to academic characteristics of the students when they were explaining their reasons of exclusions. Fall behind friends, not writing down the thoughts and not in the top 10 percentile were the only codes under this theme. These three codes were mentioned only four times by the pre-service teachers.

A male pre-service teacher (P8025) explained his reasons of not including Betül, a fourth grader who is an active class participant, to the gifted education program with the following explanation by referring to her academic characteristics:

*"I would not include her because it is stated that although her friends move to a new topic... In the following sentence, it is stated that she believes that she does not have enough time. She falls behind her friends in regard to fast thinking skills. This sentence made me to think that way"*

## Discussion

Turkish pre-service elementary school teachers' responses to the research question provided the pre-service teachers' reasons and rationale for including or not including the students in the profiles to gifted education programs.

### Reasons for inclusion

As seen from Table 3, the pre-service teachers referred to characteristics of the students when they were explaining their reasons for inclusion. Four out of five themes created under the inclusion codes were about the characteristics of the student, namely academic, personal, cognitive, and social-emotional characteristics. The last theme of inclusion was labeled as controversial issues in gifted education. This theme received the lowest frequency among the other inclusion themes. Personal and Academic characteristics themes received the highest frequencies. More than two-thirds of all the inclusion codes were under these two themes. Pre-service teachers mostly explained their reasons for including the students in the profile based on the personal and academic characteristics of the students described in the profiles.

Being curious, reading skills /achievement, academic achievement, mathematical skills/achievement, large vocabulary, and desire to learn in depth were the codes of academic and personal characteristics themes which received the highest frequencies. Although participants of this study used more words and codes to describe the characteristics of the gifted student, the result of this study are consistent with Akar and Akar (2012) regarding the codes created to describe the characteristics of gifted students. The researchers investigated Turkish in-service teachers' perceptions of giftedness and found that being curious and academic achievement were the two of the five positive characteristics used by in-service teachers to describe gifted students. This study and the Akar and Akar (2012) study showed that Turkish pre-service and in-service teachers mostly refer to the visible characteristics of the gifted students such as being curious and academic achievement when they were asked to describe the characteristics of the gifted students

or when they rationalize their reasons for including a student into gifted education programs. Reasons for exclusion. In contrast to inclusion codes, the pre-service teachers did not often refer to the characteristics of the students when they were explaining their reasons for not including the students in the profiles to gifted education programs. Turkish pre-service elementary school teachers explained their reasons for not including the students in the profiles to gifted education programs based on excuses and explanations that underestimate the potential of the students in the profiles. Although four out of five themes in this category focused on characteristics of the students, the fifth theme, which was labeled as extraordinary expectation and underestimating the potential, had a total frequency of 78, which was more than the sum of the frequencies of the other four themes. The other four themes were academic characteristics, cognitive characteristics, personal characteristics and social-emotional characteristics (see Table 4).

Normal/average student, interest in only one area, bright but not gifted, and curious but not gifted were some of the exclusion codes of the extraordinary expectation and underestimating the potential theme. The codes in this theme showed that pre-service teachers have extraordinary expectations as it relates to including a student into a gifted program. The exclusion code of “interest in only one area” shows that Turkish pre-service elementary school teachers believe that gifted people have a general intelligence that enable them to be gifted in every area. This result is consistent with the findings of Sak (2011) in which he investigated misconceptions, dogmas and trendy views of Turkish society about giftedness. Sak (2011) found that 34.4 % of participants in the study had omniscient belief; gifted people have a general intellectual capacity that enables them to be gifted in everything.

The social-emotional characteristics theme received the second highest number of codes under exclusion codes. Emotional /cry easily, do not have self-confidence, disruptiveness/negative behaviors and introspective were some of the exclusion codes under this theme. Turkish pre-service elementary school teachers did not associate any social-emotional weaknesses with gifted students; therefore, students who were crying easily, introspective, having behavior problems, and not having self-confidence were not perceived as gifted. Persson (1998) found that teachers perceive gifted students as emotionally more mature than their peers. Our results are consistent with the findings of Persson (1998) but contradicting with previous studies which investigated Turkish teachers' and lay people's perceptions of giftedness (Akar & Akar, 2012; Sak, 2011). In Akar and Akar (2012) study, the authors found that not being social (introspective), having behavior problems were two of the four negative characteristics used by Turkish in-service teachers to describe gifted students. In the other study (Sak, 2011), the author found that 60.5 % of Turkish people had syndromic belief, most gifted people possess a set of psychological symptoms such as paranoia, mania, depression, and antisocial tendencies, about gifted people. The results of this study indicated that in contrast to previous gifted perception studies (Akar & Akar, 2012; Sak, 2011), Turkish pre-service elementary school teachers did not associate any social-emotional weaknesses with gifted students and did not include the students who have these characteristics to gifted programs.

Turkish pre-service elementary school teachers rarely referred to personal, cognitive and academic characteristics of the student when they were explaining their reasons for exclusion. The total

frequency of codes created under these three themes was less than the frequency of social-emotional characteristics theme. Turkish pre-service teachers mostly explained their reasons for not including the students in the profile based on excuses and explanations that underestimate the potential of the students in the profiles or based on social-emotional characteristics of the students. SpeirNeumister, Adams, Pierce, Cassady, and Dixon (2007) stated that if a teacher is not sure whether a student is gifted, he/she will be less likely to recognize strengths of the student. Because the pre-service teachers who were part of this study did not take any classes about gifted students and their education, they were unsure about the characteristics of gifted students, and they were not able to recognize the strengths of the students in the profiles. This was especially more visible when they were explaining their reasons for exclusion of students in the profiles.

### **Research Contribution**

This study is the first study which investigated Turkish pre-service elementary school teachers' reasons of referral. By asking these teachers, why they would or would not include the hypothetical students in the Student Profile Survey to gifted education programs, I determined the characteristics of the students that these teachers associate with giftedness. In addition, responses of pre-service teachers provided more insight about Turkish Pre-service elementary school teachers' perceptions of giftedness. The number of studies focusing on reasons of referral and Turkish pre-service teachers' perceptions of giftedness are needed.

### **Practical Implications**

The results of this study revealed that Turkish pre-service teachers are not knowledgeable about gifted students' characteristics. When they were asked to explain their reasons to include the students in the profiles, they mostly explained their reasons with personal and academic characteristics of the students but they were not able to explain their reasons of exclusion based on students' characteristics. These results indicate that not being able to explaining the reasons for exclusion comes from ambiguity or lack of knowledge about the characteristics of the gifted individuals (SpeirNeumister, Adams, Pierce, Cassady, & Dixon, 2007). Policy makers should at least consider adding a course about characteristics of the gifted individuals to elementary school teaching programs' curricula for a better gifted identification process.

### **Limitations**

The first limitation of this study was the affiliation of the pre-service teachers who participated in the study. The participants of this study were pre-service elementary school teachers who were attending one of the Turkish universities, Gaziantep University. Because of that reason, generalizing the results of this study to all Turkish pre-service elementary school teachers might be problematic.

The second limitation of the study was gifted students described in each profile. Almost every scholar in the field of gifted education defines giftedness in a way to appropriate his/her perspective (Subotnik, Olszewski-Kubilius, & Worrell, 2011) and uses certain characteristics when describing the gifted students. In this study, I used profiles originally created by five experts of gift-

ed education; therefore, characteristics embedded in the profiles reflect these experts' definition of giftedness and characteristics they associated with gifted students. Other experts of gifted education field might not agree that the students described in these profiles are gifted or not associate some of the characteristics embedded in profiles with gifted students. Because of that reason, instead of exposing pre-service teachers with some pre-conceived ideas and theories, it might be better to explore pre-service teachers perceptions of giftedness without providing some pre-conceived ideas or theories in future studies. In future studies, asking pre-service teachers to define characteristics of gifted students, without providing any theories or pre-conceived ideas, might be more insightful to investigate these teachers' knowledge level of giftedness and their perceptions of giftedness.

## References

- Akar, İ. & Akar, Ş. Ş. (2012). İlköğretimokullarında görev yapmakta olan öğretmenlerin üstün yetenek kavramı hakkındaki görüşleri [Primary school in-service teachers' perceptions of giftedness]. *Kastamonu Education Journal*, 20, 423-436.
- Alvidrez, J. & Weinstein, S. R. (1999). Early teacher perceptions and later student academic achievement. *Journal of Educational Psychology*, 91, 731-746.
- Bégin, J., & Gagné, F. (1994). Predictors of general attitude toward gifted education. *Journal for the Education of the Gifted*, 18, 74-86.
- Bianco, M., & Leech, N. (2010). Twice-exceptional learners: effects of teacher preparation and disability labels on gifted referrals. *Teacher Education and Special Education*, 33, 319-334.
- Bianco, M., Harris, B., Garrison-Wade, D., & Leech, N. (2011). Gifted girls: gender bias in gifted referrals. *Roeper Review*, 33, 170-181.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20, 37-46.
- Creswell, W. J. (2014). *Research design: Qualitative, quantitative and mixed methods approaches (4th ed.)*. Thousand Oaks, CA: Sage Publications.
- Çapan, E. B. (2010). Öğretmen adaylarının üstün yetenekli öğrencilere ilişkin metaforik algıları [Teacher candidates' metaphoric perceptions of gifted students]. *The Journal of International Social Research*, 3, 140-154.
- Davis, G., & Rimm, S. (2004). *Education of the gifted and talented (5th ed.)*. Needham Heights, MA: Allyn & Bacon.
- Demirhan, E., Uyanık, K. G., Güngören, C. Ö., & Erdoğan, G. D. (2016). An examination of pre-service classroom teaching programs in terms of gifted education in Turkey. *Journal for the Education of Gifted Young Scientists*, 4, 15-28.
- Elhoweris, H., Mutua, K., Alsheikh, N., & Holloway, P. (2005). Effect of children's ethnicity on teachers' referral and recommendations decisions in gifted and talented programs. *Remedial and Special Education*, 26, 25-31. doi:10.1177/07419325050260010401
- Endepohls- Ulpe, M., & Ruf, H. (2005). Primary school teachers' criteria for the identification of gifted pupils. *High Ability Studies*, 16, 219-228.
- Erdimez, O. (2017). *Turkish pre-service elementary school teachers' perceptions of giftedness and factors affecting their referral decisions* (Unpublished doctoral dissertation). Arizona University,

Tucson, Arizona.

- Glaser, G. B. & Strauss, L. A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine Publishing Company.
- Gökdere, M., & Ayvaci, Ş. H. (2004). Sınıföğretmenlerininüstüyetenekliçocuklarveözellikle riileilgilibilgiseviyelerininbelirlenmesi [Determination of primary school teachers' knowledge level about giftedness concept]. *OndokuzMayısÜniversitesiEğitimFakültesiDergisi*, 18, 17-26.
- Grantham, T. C. (2002). Underrepresentation in gifted education: How did we get here and what needs to change? *Rooper Review*, 24, 50–51. doi:10.1080/02783190209554128
- Hallahan, D. P., Kauffman, J. M., & Pullen, P. (2009). *Exceptional learners: Introduction to special education (11th ed.)*. Boston, MA: Allyn & Bacon.
- Hunsaker, S. L. (1994). Creativity as a characteristic of giftedness: Teachers see it, then they don't. *Rooper Review*, 17, 11-15.
- Inan, Z. H., Bayindir, N., & Demir, S. (2009). Awareness level of teachers about the characteristics of gifted children. *Australian Journal of Basic and Applied Science*, 3, 2519-2527.
- McBee, T. M. (2006). A descriptive analysis of referral sources for gifted identification screening by race and socioeconomic status. *The Journal of Secondary Gifted Education*, 17, 103-111.
- McBee, T. M. (2010). Examining the probability of identification for gifted programs for students in Georgia elementary schools: A multilevel path analysis study. *Gifted Child Quarterly*, 54, 283-297.
- Michener, L. A. (1980). *A survey of the attitudes of administrators, teachers and community members toward the education of gifted children and youth* (Educational doctorate dissertation). Retrieved from Dissertations & Theses: Full Text. (Publication No. AAT 8109558).
- Miller, E.M. (2009). The effect of training in gifted education on elementary classroom teachers' theory- based reasoning about the concept of giftedness. *Journal for the Education of the Gifted*, 33, 65-105.
- Morris, S.K. (1987). Student teachers' attitudes toward gifted students. *Creative Child and Adult Quarterly*, 12, 112-114.
- Özsoy, Y. (2014). Bilim sanat merkezi öğrenci, öğretmen ve velilerinin üstün yetenekli öğrenci kavramına ilişkin metaforları [Science and art center students', teachers', and parents' metaphors regarding gifted students]. *Journal of Gifted Education Research*, 2, 74-87.
- Persson, R. S. (1998). Paragons of virtue: Teachers' conceptual understandings of high ability in an egalitarian school system. *High Ability Studies*, 9, 181-196.
- Peterson, J., & Margolin, L. (1997). Naming gifted children: An example of unintended "reproduction". *Journal for the Education of the Gifted*, 21, 82–100.
- Powell, T., & Siegle, D. (2000). Teacher bias in identifying gifted and talented students. *The National Research Center on the Gifted and Talented Newsletter*, Spring, 13-15.
- Sak, U. (2011, April). Prevalance of misconceptions, dogmas, and popular views about giftedness and intelligence: a case from Turkey. *High Ability Studies*, 22, 179-197.
- Siegle, D. (2001). *Teacher bias in identifying gifted and talented students*. Paper presented at the Annual Meeting of the Council for Exceptional Children, 80th, Kansas City, MO.
- Siegle, D., Moore, M., Mann, L R., & Wilson, E H. (2010) Factors that influence in-service and pre-service teachers' nominations of students for the gifted and talented programs. *Journal for*

- the Education of the Gifted*, 33, 337-360.
- Siegle, D. & Reis, M. S. (1998). Gender differences in teacher and student perceptions of gifted students' ability and effort. *Gifted Child Quarterly*, 42, 39-47.
- SpeirNeumister, K. L., Adams, C. M., Pierce, R. L., Cassady, J. C., & Dixon, F. A., (2007). Fourth grade teachers' perceptions of giftedness: Implications for identifying and serving diverse gifted students. *Journal for the Education of the Gifted*, 30, 479-499.
- Subotnik, R. F., Olszewski-Kubilius, P., & Worrell, F. C. (2011). Rethinking giftedness and gifted education: A proposed direction forward based on psychological science. *Psychological Science in the Public Interest*, 12, 3-54.
- Tezcan, F. (2012). *Perceptions of early childhood teachers towards young gifted children and their education* (Unpublished master's thesis). Middle East Technical University, Ankara, Turkey.
- Van Tassel-Baska, J., Patton, J., & Prillaman, D. (1991). *Gifted youth at risk: A report of a national study*. Reston, VA: The Council for Exceptional Children.
- Waterhouse, L. (2006). Multiple Intelligences, the Mozart Effect, and Emotional Intelligence: A critical review. *Educational Psychologist*, 41, 207-225.
- Yun Dai, D. & Coleman, J. L. (2005). Introduction to the special issue on nature, nurture, and the development of exceptional competence. *Journal for the Education of the Gifted*, 28, 254-269.

## Appendix A. ÖĞRENCİ PROFİLLERİ ANKETİ

### Profil 1. (Cinsiyet X Ders)

Kadir (**Keriman**) sessiz ve içine kapanık bir öğrencidir. Konuşulan konuyu bilmesine rağmen çoğu defa fikirler arasında kaybolur ve az önce ne söylendiğini hatırlamaz. Yaptığı yorumlar ise çoğu zaman konuyla alakasızdır. Kadir (**Keriman**), her çeşit kitabı okumayı sever. Özellikle (**Hayat Bilgisi, Türkçe, Matematik veya Fen Bilgisi**) dersine çok meraklıdır. Düzenli bir öğrenci olmamasına ve nadiren ödevlerini yapmasına rağmen sınavlarda iyi puan almaktadır. Onun için arkadaşları ile vakit geçirmek çok da tercih edilen bir şey değildir. Teneffüslerde yalnız başına okul içinde gezmeyi veya öğretmenleri ile konuşmayı tercih eder.

### Profil 2. (Cinsiyet X Sınıf)

Betül (**Bilal**) derse aktif katılan (**birinci, ikinci, üçüncü, dördüncü**) sınıf öğrencisidir. Derste işlenen birçok konu hakkında çok akıllıca sorular sorar. Arkadaşlarının yeni bir konuya geçmelerinin üzerinden çok zaman geçmesine rağmen o hâlâ aynı konu ile ilgilenmeye devam eder. Bu durum Betül (**Bilal**) için çok can sıkıcıdır, çünkü öğrenmesi gerekenler için kendisine yeterince zaman verilmediğini düşünmektedir. Betül (**Bilal**) birçok farklı fikir ve olay arasındaki ilişkiyi görebilmektedir. Etrafındaki insanlar tarafından çok anlaşılmayan ve takdir edilmeyen farklı bir espri anlayışına sahiptir.

### Profil 3. (Cinsiyet X Matematik X Okuma)

Melek (**Mustafa**) çok konuşkan bir öğrencidir. Geniş bir kelime hazinesine sahiptir ve kelime oyunları yapmaktan hoşlanır. Onun yaptığı espiriler genellikle etrafındaki insanlar tarafından pek beğenilmez ve onaylanmaz. Sınıf içi tartışmalarda genellikle bütün sınıfı domine etmeye çalışır ve başkalarının fikirlerinin görünmemesine sebep olur. Okumaya çok hevesli ve arzulu olmasına rağmen okuduğu kitaplar genellikle yaşına uygun görünmemektedir. (**Okuma hevesinden bahsetme**). Matematik ile ilgili kavramları çok hızlı bir şekilde anlayabilmesine rağmen, süre ile sınırlandırılmış matematik testlerinde genelde iyi performans gösterememektedir (**Matematikten bahsetme**). Melek (**Mustafa**) ödevlerini zamanında teslim eder ve ödevlerinin kalitesi ödevden ödevine farklılık gösterir.

**Profil 4. (Cinsiyet X Tutku Duyduğu Alan X Tutku Süresi)**

Demet (**Davut**) kartallara (**köpeklere**) ikinci sınıftan (**anasınıfından**) itibaren aşırı derecede meraklı olan dördüncü sınıf öğrencisidir. Odasının duvarları kartal (**köpek**) posterleri ile kaplıdır. Kartallar (**köpekler**) hakkında okul kütüphanesi ve şehirdeki halk kütüphanesinde bulunan bütün kitapları okumuştur ve şimdi de çevre illerin kütüphanelerinden kartallar (**köpekler**) hakkındaki kitapları sipariş etmeye başlamıştır. Her konuşmaya veya ödevde bir şekilde kartalları (**köpekleri**) yerleştirmeye çalışmaktadır. Yazdığı cümleler, yaptığı ödevler hep kartallar (**köpekler**) hakkındadır. Demet (**Davut**) kartallara (**köpeklere**) o kadar çok ilgi duymaktadır ki bir şekilde onları matematik ve fen bilgisi derslerine bile dâhil etmektedir. Sınıf arkadaşları kartallar (**köpekler**) ile ilgili konuşmalardan bıkmışlar ve Demet (**Davut**)'e yeni bir ilgi alanı bulmasını tavsiye etmektedirler ama o kartallar (**köpekler**) hakkında ilk günkü kadar meraklıdır.

**Profil 5. (Cinsiyet X Organizasyon Becerisi)**

Sami (**Selma**) öğrenmeyi seven ve birçok arkadaşı olan parlak bir dördüncü sınıf öğrencisidir. Sami (**Selma**) düzenli bir öğrencidir. (**Genelde masasını düzenli tutmada zorlanır ve ödevlerini yanlış yerlere koyar. Ödevleri genelde düzenli değildir**). Sami (**Selma**) cana yakın ve sosyal biridir. Problem çözme becerileri mükemmel ve okumaya çok isteklidir. Sami (**Selma**) tarihi mekânlara çok meraklıdır. Türkiye'deki bütün sarayların bulunduğu şehirleri ve bu sarayların yapılış tarihlerini ezbere bilir ama kendi okulunda organize edilen etkinliklerin tarih ve saatlerini hatırlamakta zorluk çekmektedir.

**Profil 6. (Cinsiyet X Ders X Kendini İfade Etme)**

Necip (**Nalan**) mükemmel matematik becerilerine sahip (**okumaya çok meraklı ve istekli olan**) beşinci sınıf öğrencisidir. Okulda başarılı ve ödevlerini düzenli yapan bir öğrencidir. Çoğu kez kendi görüşlerini açıklamaktan çekinir ve fikirleri arkadaşlarının etkisiyle çok çabuk baskı altına alınır. (**O kendi fikirlerini korkusuzca dile getirir ve bazen bu kararlılığı arkadaşları ile arasında gerginliğe yol açar**). Necip (**Nalan**) balıkları çok sever ve bulduğu her fırsatta balıklar hakkında bir şeyler okur. Hatta anne ve babasını arka bahçelerinde küçük bir balık havuzu yapma konusunda ikna etmiştir.

**Profil 7. (Cinsiyet X Dikkat)**

Gülay (**Galip**) birçok konuya ilgisi olan yaşama sevinciyle dolu bir dördüncü sınıf öğrencisidir. Onun son zamanlardaki tutkusu balina ve yunuslardır. Her gün sahile vuran balinalar ile ilgili haberleri takip etmektedir. Öğlen arasında okuldaki arkadaşlarını "Balinaları koruyalım" kampanyasına katılmaları için ikna etmeye çalışmaktadır. Gülay (**Galip**)'ın çok farklı alanlara olan ilgisi sınıf içerisinde onun bir konuyu veya ödevi tamamlamadan başka bir konuya yönelmesine sebep olmaktadır. Genelde dalgın ve düşüncelidir. (**Gülay /Galip derste genellikle verilen etkinliği tamamlamaz, önceki etkinliği veya ödevi tamamlamadığını fark etmeden bir sonraki etkinliğe geçer. Gülay /Galip genellikle derste odaklanamamaktadır**). Gülay (**Galip**)'ın ödevlerinden onun matematik problemlerini çözmeye yetenekli olduğu anlaşılmaktadır. Yaratıcı hikâye yazma konusunda ayrıntılı fikirleri olmasına rağmen bu fikirlerini çok nadir yazıya dökmektedir.

**Profil 8. (Cinsiyet X Diğer Öğrenciler Üzerindeki Etki)**

Leyla (**Lokman**) tarih dersine aşırı derecede ilgi duyan bir dördüncü sınıf öğrencisidir. Osmanlı İmparatorluğu'nu yöneten bütün padişahların adlarını ve imparatorluğu yönettikleri seneleri ezbere bilmektedir. Leyla (**Lokman**) dominant (**lider olarak doğmuş**) bir kişiliktir ve gittiği yolda arkadaşlarının kendisini takip etmesini sağlayabilecek biridir. Leyla (**Lokman**) kompozisyon yazma ve bilgileri hatırlama konusunda çok mükemmel becerilere sahiptir.

**Profil 9. (Cinsiyet X Duygu)**

Ertan (**Eylül**) çok mükemmel okuma becerileri olan bir dördüncü sınıf öğrencisidir. Bütün kitap türlerini bir çırpıda okuyup bitirmekle beraber en çok fabl türünü sevmektedir. Ertan (**Eylül**) olumsuz durumlar karşısında çok yoğun duygusal tepkiler gösteren hisli bir kişidir. (**Ertan /Eylül**

**kendi istediği olmayınca kolayca ağlayan, yaşına göre olgun olmayan biridir).** Ertan (Eylül) ödevlerini düzgün bir şekilde yapan ve zamanında teslim eden bir öğrencidir.

**Profil 10. (Cinsiyet X Arkadaşları ile İlişkiler)**

Cemal (**Canan**) mutlu ve parlak bir üçüncü sınıf öğrencisidir. Sınıf arkadaşlarıyla çok iyi anlaşamamaktadır ve çoğu kez konuyu anlamayan arkadaşlarına yardım etmesi istendiğinde bu duruma öfkelenmektedir (**O arkadaşlarıyla çok iyi geçinen ve konuyu anlamayan arkadaşlarına her zaman yardımcı olmaya çalışan bir öğrencidir**). Cemal (**Canan**) bilim kurgu olmayan kitapları okumaktan hoşlanır ve bu kitaplardan öğrendiği bilgileri sınıf arkadaşları ile paylaşmak ister. Cemal (**Canan**) gün içerisinde birçok kez öğretmenin sözünü yarıda kesip ona ve sınıf arkadaşlarına okuyup öğrendiği şeyleri anlatmaya çalışmaktadır. Öğretmen, Cemal (**Canan**)' in öğrenme aşkını her ne kadar takdir etse de, sınıfın düzenini bozan bu tavrının diğer öğrenciler için problem olduğunu düşünmektedir.

**Profil 11. (Ekonomik Durum X Ailede Daha Önce Üstün Zekâlı Olarak Tanımlanma Durumu)**

Azra, anne-babası ve lise ikinci sınıfa giden kardeşi ile beraber yaşayan düzenli ve parlak bir ikinci sınıf öğrencisidir. Ailesinin ekonomik durumu iyidir (kötüdür). Azra duygusal, empatik ve arkadaşları tarafından kabul gören bir öğrencidir. Derslerinde üstün başarı gösteren meraklı biridir. Azra kaplumbağalara aşırı derecede ilgi duyan ve zamanının birçoğunu bilim kanalını izleyerek geçiren biridir. Matematik alanında üstün zekâlı olan abisiyle çok iyi geçinir (**Üstün zekâlılar programına kabul edilirse, ailesinde üstün zekâlılar programına kabul edilen ilk kişi olacaktır**).

**Appendix B. INTERVIEW QUESTIONS**

Q.1. Why would you include/ not include ..... (student's name in the profile) to the gifted program?

Q.2. What characteristic/s of ..... (student's name in the profile) made you decide to include/ not include him/her to the gifted program?

Q.3 What were your hesitations when including/not including .....(student's name in the profile) to the gifted program?