Cumhuriyet International Journal of Education – Cumhuriyet Uluslararası Eğitim Dergisi
e-ISSN: 2147-1606
Volume / Cilt 8 | Issue / Sayı 4 December / Aralık 2019

Öğretmenlerin Özel Yetenekli Öğrenciler ve Eğitimlerine İlişkin Görüşleri ve Metaforik Algıları

H. Gülhan ORHAN KARSAK[1] **Burak GİDER**[2]

Type/Tür:
Research/ Araştırma
Received/Geliş Tarihi:
March 23/ 23 Mart 2019
Accepted/Kabul Tarihi:
August 27/ 27 Ağustos 2019
Page numbers/Sayfa No: 961-982
Corresponding Author/İletişimden Sorumlu Yazar: gorhan811@gmail.com

Öz

Okul öncesi ve sınıf öğretmenlerin öğrenci yaşantılarına ilişkin empati kurabilmesi, problemlere özel yetenekli öğrencilerin gözünden bakabilmesi için bu öğrencilerin düşünme biçimlerini, problem çözme yöntemlerini, genel ve kişisel özelliklerini bilmeleri önem taşımaktadır. Bu amaçla okul öncesi ve sınıf öğretmenlerinin, özel yetenekli öğrencilerle ilgili metaforik algılarını ve bu öğrencilerin özelliklerine, tanılama ve eğitim süreçlerine ve sınıf ortamında yapılabilecek uygulamalara ilişkin görüşlerini belirlemek alana katkı sunmada oldukça önemlidir. Nitel olarak desenlenen bu olgubilim (fenomenoloji) çalışmasına farklı kurumlarda görev yapan 6 sınıf öğretmeni ve 11 okul öncesi öğretmeni olmak üzere toplam 17 öğretmen katılmıştır. Araştırmacının biri tarafından özel yetenekli kavramı kapsamında, öğretmenlerin "üstün zekalı (gifted) öğrenci" ve "üstün yetenekli (talented) öğrenci" kavramlarına ilişkin metaforik algıları ve bu öğrencilerin özellikleri, tanılanması ve eğitimleri hakkındaki görüşleri 50 dakika süre tanınarak bireysel ve yazılı olarak alınmıştır. Görüşme dökümleri, Nvivo 8.1 aracılığıyla kategoriler ve temalar oluşturularak içerik analizi tekniğiyle çözümlenmiştir. Sonuçlardan bazıları şöyledir. Öğretmenler özel yetenekli öğrencilerin bilişsel, duyuşsal ve psikomotor alanda pek çok özelliğe sahip olduklarını belirtmişlerdir. Öğrencilerin zeka ve yetenek alanlarını dikkate alarak düzenlenecek hizmet içi öğretmen eğitimlerine ve öğretim etkinliklerine gereksinim vardır. Katılımcı öğretmenler "üstün zekalı öğrenci" kavramına ilişkin yedi farklı kategoride on metafor ve "üstün yetenekli öğrenci" kavramına ilişkin altı farklı kategoride yine on metafor üretmişlerdir.

Anahtar Kelimeler: Okul öncesi öğretmeni, sınıf öğretmeni, üstün zeka, özel yetenek, metafor.

Suggested APA Citation /Önerilen APA Atıf Biçimi:
Orhan Karsak, H. G., & Gider, B. (2019). Metaphorical perceptions and views of teachers about gifted and talented students and their education. *Cumhuriyet International Journal of Education*, *8*(4), 961-982. http://dx.doi.org/10.30703/cije.543321

[1] Dr.Öğr.Üyesi, Kırklareli Üniversitesi Fen- Edebiyat Fakültesi, Eğitim Bilimleri Bölümü, Kırklareli/Türkiye
Assist.Prof.Dr., Kırklareli University, Faculty of Science and Literature, Department of Educational Sciences, Kırklareli/Turkey
e-mail: gorhan811@gmail.com **ORCID ID:** https://orcid.org/0000-0001-5927-6341

[2] Okul öncesi öğretmeni, Muş Konukbekler İlkokulu, Muş /Türkiye
Preschool teacher, Muş Konukbekler Primary School, Muş/ Turkey
e-mail: burakgiderr@gmail.com **ORCID ID:** https://orcid.org/0000-0002-6374-7123

Metaphorical Perceptions and Views of Teachers About Gifted and Talented Students and Their Education

Abstract

It is important for preschool and primary school teachers to be able to empathize on students' life and to look at problems in the eyes of gifted and talented students and to know their thinking styles, problem solving methods, general and personal characteristics. For this purpose, it is very important to contribute to the field by, putting forth preschool and primary school teachers' metaphorical perceptions about gifted and talented students and determining the teachers' views about the characteristics of these pupils, their diagnosis and education processes, and the activities in the classroom environment that they can do. A total of 17 teachers, including 6 classroom teachers and 11 preschool teachers who work at different institutions, participated in this qualitative study, phenomenology. Metaphorical perceptions of teachers' about gifted and talented concepts and their views on the characteristics, diagnosis and education of these students were taken individually by giving 50 minutes for each other in writing. Views are analyzed by using content analysis technique and categories and themes created via Nvivo 8.1. Some conclusions are as follows. Teachers stated that gifted and talented students have many different features in cognitive, affective and psychomotor field. In-service teacher trainings and instruction activities which should be arranged by taking into consideration the students' intelligence and ability areas, are necessities. Participant teachers produced ten metaphors in seven different categories related to gifted students and a total of ten metaphors in six different categories related to talented students.

Keywords: Preschool teacher, primary school teacher, gifted, talented, metaphorical perceptions.

Introduction

The diagnosis of gifted and talented students is made in the first and second grades of primary school in Turkey, especially starting from preschool period. Studies identifying gifted and talented students in Turkey have begun with the Turkish adaptation of Stanford-Binet Intelligence Scale, Basic Abilities Test and WISC-R Intelligence Test. Turkey's Anadolu-Sak Intelligence Scale (ASIS), which is the first national intelligence scale is developed for the range of 4-12 years pupils by UYEP Center research team with the project support of Anadolu University and the support of the Ministry of National Education between the years 2015-2017.

Many researchers associate the concept of gifted and talented with the students who have an IQ score of 130 or higher as a result of the application of the intelligence scale. (Cooper, 2013; Gagne, 1985; Karatas & Saricam, 2016; Peterson, 2015; Renzulli, 2011). Gifted and talented students are separated from their normal peers by creativity abilities, visual and performance arts talents, willingness to act independently, energetic structures, risk-taking structures (Mastropieri & Scruggs, 2000), planning capabilities (Leana-Tascilar, 2016), entrepreneurial skills (Cetin & et. al. , 2017), multiple potentials in their abilities and interests (Achter & et. al., 1997), their hypersensitivity, their willingness to solve problems their anxiety and desperate feelings (Roeper & Silverman, 2009). According to Battles (2007), the superiority of a child in terms of intelligence means meeting his/her specific needs for instruction requirements. According to him, definitions of gifted and talented are based on many factors. These factors can be listed as IQ points, psychomotor skills, leadership

ability, creativity, motivation, humor, potential, artistic talent, visual ability, performance ability, and advanced level of mother tongue expertise. In addition, Battles (2007) recommends that educators use the definitions based on many factors in diagnosing gifted and talented students.

Science and Art Centers are responsible for diagnosing gifted and talented students in Turkey. Science and Art Centers are centers that provide education in a setting outside the school and within the specified hours in accordance with the interests and abilities of these students (Kazu & Senol, 2012; Kurnaz, 2013). Also they provide education such as science high schools, social sciences high schools, fine arts and sports high schools and anotalian high schools at high school level. They also provide education in private school models such as conservatories at undergraduate and graduate level. The student who wants to be accepted to Science and Art Center is diagnosed in stages by (1) teacher nomination, (2) participating in group intelligence test, (3) participating in individual intelligence test. Students who have an IQ score of 130 or above are enrolled by quota, in descending order according to the height of the score taken from the intelligence test. In the third stage, 130 IQ points are accepted as threshold values. After acceptance, the student participates (1) integration sub-program, (2) instruction sub-program, (3) sub-program of recognizing individual skills, (4) sub-program of developing special abilities and (5) sub-program of project production in the Center (Sak et.al., 2015). Robins and Chandler (2013) also point out that each unit planned for gifted and talented students must have certain features. These include identifying learning objectives, authentic evaluations for content, context and process, focusing on creative thinking, engaging in creative thinking, active participation and learning, using advanced resources, using macro concepts to increase understanding of the subject, using metacognition components, applying to interdisciplinary real life research, using graphic organizers to configure instruction executing high-level thinking and using specific skills and concepts of subject area.

It is important for the teachers to be knowledgeable about the gifted and talented concept and training as stated by Battles (2007) for the qualitative diagnosis and training of gifted and talented students. However, many teachers in our country need improvement to have knowledge of gifted and talented students (Inan, Bayindir, & Demir, 2009; Gokdere & Ayvaci, 2004; Sahin & Kargin, 2013), to recognize these students, to understand their needs in different areas and to organize teaching activities appropriate to their individual differences. Because, as stated by Sahin and Cetinkaya (2015), most preschool, primary school and branch teaching undergraduate programs do not include courses for gifted and talented students but only contain one unit in special education courses. In addition, informative in-service training programs and certified courses related to the training of teachers are very limited.

In this context, Christensen-Needham (2010) points out the necessity of class teachers to be knowledgeable about the situation by stating that many classroom teachers are unsure about the social and emotional characteristics and needs of gifted and talented students. In addition, as a false knowledge, many teachers have the idea that gifted and talented students do not need special attention due to their existing academic qualifications. However, a low level of academic interest can be

detrimental to gifted and talented students, both socially and emotionally. Also, as stated by Muratori and Smith (2015), gifted and talented students need a special coaching and guidance.

Koksal, Gogsu and Kilic (2017) also emphasize that the majority of BILSEM teachers think that all of the characteristics of affective and social areas need to be improved, but their development in the areas of home economics and home management, musical ability, picture talent, dancing talent, role-playing, sportive activity in cognitive and psychomotor field are less important than other cognitive and psychomotor qualities.

On the other hand, Al zoubi (2014) stated that in his study which examined the effect of enriched activities for thirty gifted and talented students, is needed educational services that can meet the special talent needs and different educational programs from their non-gifted peers, and they need enriched activities to be organized by teachers in this context. In addition, the researcher shares the conclusion that enriched activities are effective in the academic achievements and performances of gifted and talented students, especially in their thinking skills, critical thinking ability, creativity, oral language, scientific and academic language skills. The researcher recommends that students and teachers receive seminars in order to make the planning and evaluation of these activities systematically. Similarly, in Kutlu-Abu, Akkanat and Gokdere (2017), classroom teachers stated that it was unnecessary to make differentiation in the education of gifted and talented students and that the existing curriculum was sufficient for them. From this conclusion, the researcher suggests that teachers should provide in-service trainings to increase their negative attitudes and beliefs about the education of gifted and talented students and thus increase their awareness level. In addition, Cetin and Dogan (2018) stated that teachers experienced problems related to the activities applied to gifted and talented students and they also experienced problems such as being disinterested / unwilling to behave, being tired physically and mentally, being absent, exhibiting inappropriate behaviors.

Based on the results, it can be said that it is an important requirement that preschool and primary school teachers have the necessary consciousness and infrastructure to organize learning processes and to form the measurement evaluation process of gifted and talented students in accordance with their individual differences related to developing their talents in different fields. Emphasizing the importance of planning activities for gifted and talented students, Ozcan (2017) concluded that the activities organized by teachers affect the career planning of gifted and talented students. Early detection of gifted and talented students by teachers and parents is also very important in terms of ensuring their education at an early age in accordance with their abilities and interests (Bildiren, 2018). As already stated by Ozenc and Ozenc (2013), the sample of the majority of researches on the gifted and talented in our country is composed of students. However, there is also a need for research in which teachers are sampled.

In this context, the determination of teachers' views on the education of gifted and talented students is a need for a more qualified cooperation, division of labor and communication in the relationship between teacher-student-parent- school managers (Coleman & Gallagher, 1992). The views of preschool and primary school

teachers, which students spend a long time together in the classroom atmosphere prior to the diagnostic process, are quite valuable to explore the characteristics of gifted and talented children, to discover the potential of gifted and talented children about the education of these students and to provide the necessary support for the needs of these students and to give special training. In Special Education Services Regulation of Turkey (2018) and in different researches (Karatas & Tagay, 2019; Ozcelik & Akgunduz, 2018; Unal & Er, 2015; Unlu & Dokme, 2017) in recent years precisely between the 'gifted' and 'talented' concepts as the features separated by lines are not used, the concept of 'special talented' has started to take place instead of these two concepts. The definition of a 'special talented person' in the regulation of special education services as "an individual who learns faster than his peers, who has the capacity in creativity, art and leadership, who has special academic skills, who can understand abstract ideas, who likes to act independently in his fields of interest and who perform at a high level performance" are expressed. It is seen in the majority of studies in the literature (Eileen, 2018; Eren & etc., 2018; Mayorova & etc., 2018; Worrell & etc., 2019), apart from the prominence of intelligence feature in the concept of 'gifted', prominent and similar characteristics related to the concepts of 'gifted' and 'talented' were stated. While different theories such as Renzulli's 1978 Three Ring Theory (Renzulli, 2005); Sternberg's 1997 Successful Intelligence Triple Sheet Pillar Theory (Sternberg, 2003) and Tannenbaum's Sea Star Theory emphasized the characteristics of special talented person, Renzulli's 1978 Three Ring Theory revealed that exclusion of academic success; sufficient motivation, talent and creativity in a particular area were special talents (Renzulli, 2005; Karabey & Yurumezoglu, 2015) According to Renzulli's model, there are three categories of different features. These can be listed as motivation, creativity, general special talent. In the scope of 'general special talent'; the features of advanced memory, advanced vocabulary, extensive knowledge, easy and fast learning, etc. were discussed. In the scope of motivation; concentrating on problems and tasks, set their own rules and standarts, intense interest in activities, little external motivation to perform tasks, leadership ability, high energy, etc. were discussed. And in the scope of creativity; openness, originality, skilful humor, convert and combine ideas, etc. were discussed. In this context, it would be a good decision to examine preschool and primary school teachers' metaphorical perceptions and views about gifted and talented students and their education in this study. However, in the metaphor dimension of this study, the two concepts were deliberately separated and asked to produce separate metaphors for the concepts of 'gifted students' and 'talented students'.

The following questions have been sought for this general purpose:

1. What are the views of preschool and primary school teachers about gifted and talented students?
2. What are the views of preschool and primary school teachers about the process of diagnosis of gifted and talented students?
3. What are the views of preschool and primary school teachers about the teaching process of gifted and talented students?
4. What are the metaphorical perceptions of preschool and primary school teachers about the concept of gifted students?

5. What are the metaphorical perceptions of preschool and primary school teachers about the concept of talented students?

Methodology

Research model, data collection and analysis, validity and reliability, working group is presented in this department.

Participants

The participants consisted of 17 teachers; 6 primary school teachers (4 female, 2 male) working in a primary school of the Ministry of National Education and 11 preschool teachers (10 female, 1 male) working in a kindergarten of the Ministry of National Education in the central district of Mus province in 2017-2018 academic year. The teachers who participated in the study were determined according to the principles of easy accessibility and voluntariness by the convenient sampling method. In this study, all primary and preschool teachers in the school were asked to participate in the study and participation was left to the wishes of volunteer teachers in order to receive sincere answers to the research questions. Teachers who did not want to participate were not forced to participate. In qualitative studies, an easily accessible or convenient sample is the method of choosing a sample by choosing the easiest, saving time, money and effort at the expense of knowledge and reliability (Baltaci, 2018). As primary and preschool, all teachers were chosen from the different parts of the same school building which is easily accessible for the researcher and obtained permission for this research. The volunteer primary and preschool teachers from the same building was chosen because of the same environment and the teachers who are in this environment have same instruction oppurtunities and same social and economic facilities. While the entire participants participated in the interviews, only ten volunteers from the participants participated in the metaphor study. Other six participants didn't want to participate in the metaphor study. The characteristics of the participants are presented in Table 1.

Table 1

The Characteristics of the Participants

Profession	Quantity	Gender	Quantity	Graduation Status
Primary School Teacher	6	male	2	Bachelor's Degree
		female	4	
Preschool Teacher	11	male	1	Bachelor's Degree
		female	10	

Research Model

This research is a qualitative research in the phenomenology pattern of preschool and primary school teachers examining their opinions and metaphorical perceptions of 'gifted students' and 'special talented students' in order to determine their awareness and knowledge about the characteristics, diagnostic and educational processes of gifted and talented students. In the phenomenology study, the common meaning of a few people or participants' experiences with a phenomenon or concept is defined with the common characteristics of the participants, resulting in the achievement of the essence of the individual's experiences (Creswell, 2013).

Phenomenons are experienced in the form of events, experiences, perceptions, orientations, concepts and situations (Yildirim & Simsek, 2008). In this study, the phenomenology pattern was chosen to reveal the similarities and differences between the teachers' experiences of gifted and talented students. The aim of this study is to examine the views of preschool and primary school teachers about the characteristics of gifted and talented students, their diagnostic and educational processes and to examine the metaphorical perceptions of the concept of 'gifted students' and 'special talented students' in detail.

Data Collection

A total of five semi-structured questions were asked; three questions to determine participants' views and two questions to determine metaphorical perceptions. In the metaphor dimension of the study, the two concepts were deliberately decomposed and asked to produce separate metaphors for the concepts of 'gifted students' and 'talented students'. The responses of the participant teachers were taken in written form in fifty minutes by the interview form formed by the researchers and also re-arranged in line with the opinions of an expert in the field. The views of the participant teachers were directly quoted and coded in Teacher 1, Teacher 2… etc. format.

Data Analysis

Data were analyzed by content analysis via Nvivo 8.1. Content analysis is a process in which similar data is gathered around certain themes according to the messages and meanings they contain and encoded and interpreted in a layout that the reader can understand (Ozdemir, 2010; Tavsancil & Aslan, 2001). In analyzing the data; data reduction, visualization of the data, reaching the results and approval stages (Miles & Huberman, 1984) were followed. The data were categorized again and again by comparing the differences and similarities of participant teachers (Altunisik et al., 2010), themes were formed and codes were determined. The metaphors produced by the participant teachers were formed by examining the categorization of Renzulli's (2005) 1978 Three Ring Theory. Then it is presented by tables with frequency and percentage values.

Validity and Reliability

In order to increase the credibility of the research within the scope of the validity and reliability of the study, detailed information about the characteristics of the participant teachers was shared, as suggested by Cetin and Dogan (2018). Again, in order to ensure credibility, an expert researcher in qualitative research was consulted, in line with the recommendations of experts, arrangements were made in the research. The data obtained as a result of the interviews to ensure transferability are presented in detail without joining the comments. In order to ensure consistency, the research method, the preparation and analysis of data collection tools and the data collection and analysis processes are detailed. When analyzing the data, in order to ensure the coding consistency, two researchers coded each other unaware. Compliance between two encoders was determined using the formula (Reliability = Consensus / Consensus + Interpretation X 100) of Miles and Huberman (1994) and as a result of the calculation the fit between the two encoders was determined as .85

ratio. It was decided to decompile the coding ideas. New themes and codes are rearranged. The findings are supported with visuals and presented directly by quoting from the teachers' opinions. All data of the research for confirmation have been stored on the computer.

Themes

There are five themes that was reached for this research.

1. The views of preschool and primary school teachers about gifted and talented students
2. The views of preschool and primary school teachers about the process of diagnosis of gifted and talented students
3. The views of preschool and primary school teachers about the education and instruction process of gifted and talented students
4. Metaphors for gifted students
5. Metaphors for talented students

Findings

The Views of Preschool and Primary School Teachers About Gifted and Talented Students

Findings about the views of preschool and primary school teachers about the characteristics of gifted and talented students are presented in Figure 1.

As seen in Figure 1, participant teachers' views on the characteristics of gifted and talented students are grouped under three main themes: cognitive [f(55)], affective [f(13)] and psychomotor [f(13)]. The most repetitive data shared by the participant is that the gifted and talented students have superior development [f(9)] and creativity skills [f(10)] from their peers. Teachers emphasize; in the psychomotor area, early walking [f(5)] and mobility characteristics [f(8)], in the affective area, sensitivity [f(5)] and special interest [f(8)], as well as negative characteristics such as individuality [f(1)], indifference [f(2)]; in cognitive area, creativity [f(10)], charm [f(3)], early speech [f(2)], superior development [f(9)] and superior academic achievement from peers and entrepreneurship [f(5)]. They draw attention within the scope of their thinking abilities [f(32)] such as creative, multi-dimensional, quick thinking, deep questioning, detailed and broad imagination, strong memory, curiosity and unlimited questioning ability, analysis and synthesis, finding different ways to solve problems and also under the entrepreneurial capabilities, leadership and high self-confidence features.

Some teachers' views on the theme are presented below:

Teacher 1: *They want to be on the fast track and at the top and at the forefront of every activity. They have a strong will and memory. They have high energy potentials. The level of curiosity is high. They have more information than their peers. Early learning leads to higher levels of self-confidence. They have detailed eye.*

Teacher 3: *They display unusual features. Perception capabilities are improved. They develop unique problem solving methods. Multi-dimensional thinkers use the methods they find in different fields. They think fast, they come to the conclusion quickly. They do not show anxiety in the subjects that require struggle.*

Teacher 5: *They are immediately recognized among their peers. They look at things from a different perspective. Gifted children are creative, interested in the invisible aspects of*

the event and are more successful among other children. Cognitive areas are developed. Psychomotor abilities of gifted children are more developed. They develop more original talents than the other children and present original products.

Teacher 9: *They're very moving. They have features such as asking questions, attracting attention and asking for attention. They have the capacity of leadership.*

Teacher 16: *They are hypersensitive in psychomotor behavior. They exhibit behaviors such as sudden reaction, inability to stand. They have the skills of questioning, strong observation, independent thinking, and attachment to people and objects by research.*

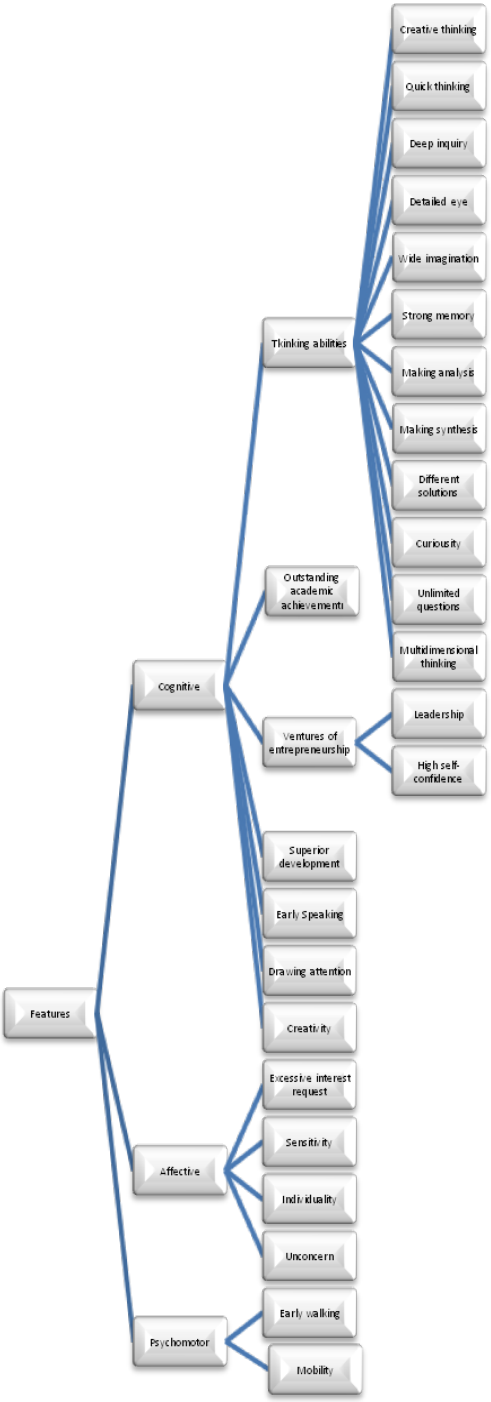

Figure 1. The views about the characteristics of gifted and talented students

The Views of Preschool and Primary School Teachers About The Process of Diagnosis of Gifted and Talented Students

The findings of the views of preschool and primary school teachers about the process of diagnosis of gifted and talented students are presented in Figure 2.

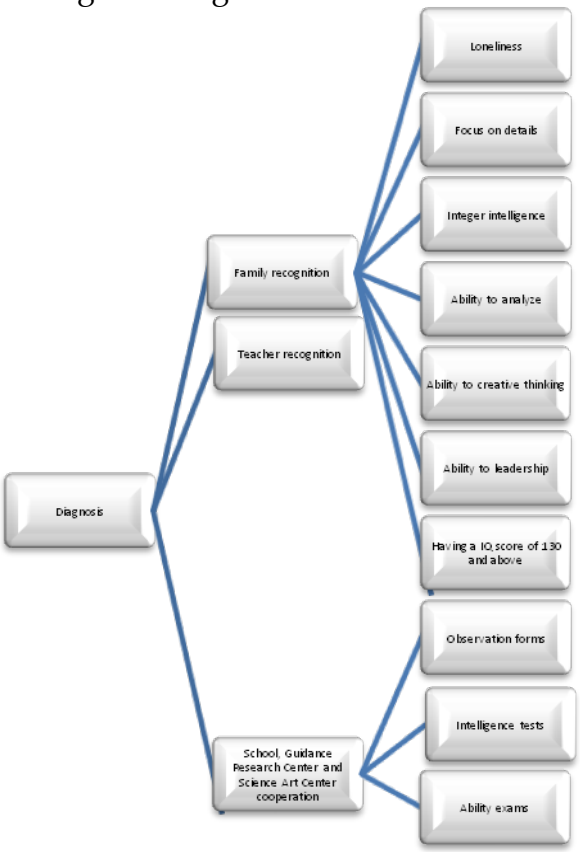

Figure 2. The views about the process of diagnosis

As can be seen in Figure 2, the views of the participant teachers about the diagnosis process of the gifted and talented students are grouped under three main themes; being noticed by family [f(6)] and teacher [f(9)], cooperation between School and Guidance Research Center [f(5)], cooperation between School and Science Art Center [f(5)]. It is stated by family and teacher that the first noticed abilities of gifted and talented students are loneliness, the ability to focus on details, intrapersonal intelligence, analysis, creative thinking, leadership skills, and IQ scores of 130 and above from WISC-R intelligence test. Among these skills, the most shared and most repetitive data by teachers are the creative thinking and leadership abilities. In addition, participants in the three main themes stated that the students were most noticed by their teachers and that they were directed to the Guidance Research Centers in cooperation with the School and Science Art Center. In addition, in the diagnosis process of the students, the most frequently mentioned form of evaluation was the intelligence test.

Some teachers' views on the theme are presented below:

Teacher 7: *The teacher should get help from the school counselor for the child he understands. The child should be referred to Guidance Research Center if they have a common opinion with the counselor. As a result of the tests carried out here, the diagnosis of the child*

arises and differentiations are brought to the education of the child through the cooperation of family and school. It is directed to go to Science Art Center except for the school.

Teacher 11: *Creative and productive thinking skills, ability in visual and performing arts, leadership ability and general mental and special academic skills helps in diagnosis process. These characteristics are classified. Individual and group intelligence tests, when the average of the scores obtained from the achievement test is 120 and over, the diagnosis is realized.*

Teacher 12: *Children are diagnosed by means of intelligence tests (group or individual tests) together with family and teacher observations.*

Teacher 14: *They are diagnosed at the Science Art Center. Group achievement tests and individual achievement tests are applied.*

The Views of Preschool and Primary School Teachers About The Education and Instruction Process of Gifted and Talented Students

The findings of the views of preschool and primary school teachers about the education and instruction process of gifted and talented students are presented in Figure 3.

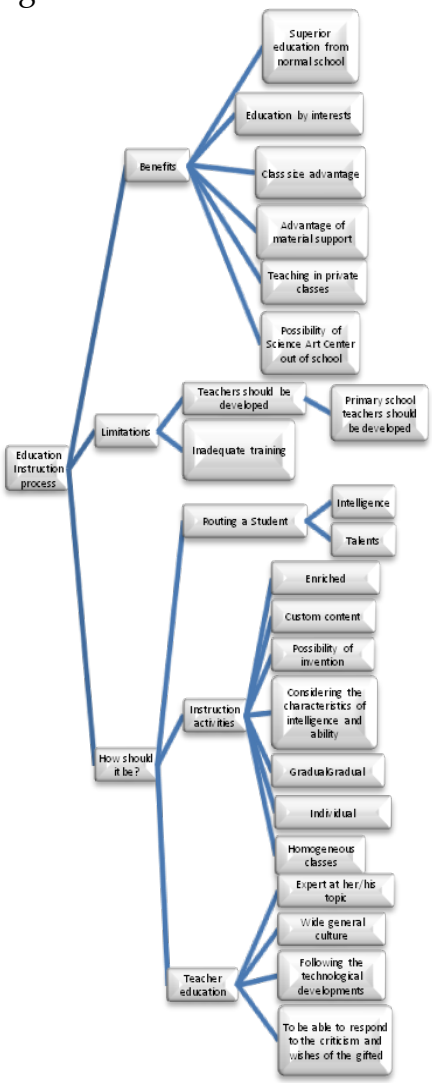

Figure 3. The views about the education and instruction process of gifted and talented students

As seen in Figure 3, the views of the participant teachers' about the education and instruction process of gifted and talented students are collected in three main themes which are the benefits [f(19)], the limitations [f(2)] and how they should be [f(14)]. Participant teachers mostly emphasized the necessity of teacher education [f(5)] in such a way as to have the qualifications mentioned in Figure 3. For the gifted and talented students, they mentioned about the benefits of the education process in Turkey, the most not only the school but also the possibility of education and in Science Art Center. Concerning the limitations, the focus is on the need for teachers to be improved as they are insufficient for gifted and talented students. Regarding how the teaching process should be, it is pointed out that the teachers should be trained with in-service trainings so as to meet the criticism and demands of the gifted and talented students, and that the teaching activities should be arranged by taking into consideration the students' intelligence and ability areas and directing the students.

Some teachers' views on the theme are presented below:

Teacher 1: *It should be supported with special content. Possibilities should be provided in accordance with their intelligence and abilities. Their training should take place in certain steps and those who will give the training must have passed all necessary steps.*

Teacher 2: *These students are educated in both Science Art Center and normal schools. What is most important in the process is that teachers should be proficient in their fields and should be equipped with a wide range of general cultures, following technological developments, and responding to the wishes and criticism of students.*

Teacher 3: *I think that the system implemented in Turkey is not enough. In particular, the choice of these children should be more precise and should be decisive. Primary school teachers should be informed in this regard. In-service training should be provided to teachers on the process.*

Teacher 12: *The process continues in schools and Science Art Centers. Enriching educational activities can be done. In education process, children can be turned into individuals who are open to production by using space and materials suitable for making new inventions.*

Metaphors

The metaphors produced for gifted students are presented as a whole in Table 1.

Table 1
Metaphors for Gifted Students

Category	Metaphor	f	%
Motivation	Labor	1	10
Creativity	Ingeniously	1	10
GST	Star	1	10
GST	Sun	1	10
GST	Guiding	1	10
GST	Unique	1	10
GST	Idol	1	10
GST	Sky	1	10
GST	High mountain	1	10
GST	Mountain	1	10
Total		10	100

As seen in Table 1, the participant teachers produced ten metaphors in seven different categories related to gifted students. While the most metaphor is produced in 'general and special talent (GST)' category according to Renzulli's three ring theory. Very few metaphors were produced in the categories of 'motivation' and 'creativity'. Each metaphor is produced only once. Some of the metaphors produced for gifted students are: "The gifted is like a mountain without a peak. Because their learning capacity is always high, curiosity levels and energy levels are high." "The gifted is like labor. Because he/she exists with what's around him/her." "The gifted is like a star. So he or she expects to be noticed." "The gifted is like the sun. So he or she illuminates with his/her intelligence." "The gifted is like a sky. So his or her intelligence doesn't have an end."

Table 2
Metaphors for Talented Students

Category	Metaphor	f	%
Motivation	Iron	1	10
Motivation	Bottomless pit	1	10
Creativity	Oasis in the middle of the desert	1	10
Creativity	Original	1	10
GST	Polar Star	1	10
GST	Article carefully written	1	10
GST	Pearl	1	10
GST	Architect Sinan	1	10
GST	Spring	1	10
GST	Rainbow	1	10
Total		10	100

As seen in Table 2, the participant teachers produced a total of ten metaphors in six different categories related to talented students. While the most metaphor is produced in 'general and special talent (GST)' category according to Renzulli's three ring theory. Few metaphors were produced in the categories of 'motivation' and 'creativity'. Each metaphor is produced only once. Some of the metaphors produced for talented students are: "The talented is like an oasis in the middle of the desert. Therefore there are few." "The talented is like a spring. For that reason, colorful flowers bloom." "The talented is like a rainbow. So he or she will color it." "The talented is like a bottomless pit. Because it won't work if he/she doesn't come out." "The talented is like a pearl in the sea. Therefore it's very rare."

Conclusion and Discussion

This research has examined the views of preschool and primary school teachers about the characteristics of gifted and talented students, their diagnostic and educational processes and to examine the metaphorical perceptions of the concept of 'gifted students' and 'special talented students' in detail.

In the context of the first question asked in order to realize this aim, teachers stated that gifted and talented students have many different features in cognitive, affective and psychomotor field. Additionally they stated that gifted and talented students have many thinking skills. Similar to the results of this research, Lee (1999)

found that teachers produced metaphors of excellence, potential, rareness, behavior, innate ability, motivation and asynchrony related to the gifted students. Additionally Olthouse (2014) states that teachers emphasize strong memory, success, excellence and rarity metaphors. Also Battles (2007), took views from eighty middle school teachers about the federal and state law definitions of gifted and talented such as 65% of the participants correctly defined the concept of it, 78% of the participants said that parents, teachers and school administrators had high expectations from gifted and talented students, 85% said that gifted and talented students did not have the advantage of having a better time in school because of their superiority. In this context, it is very important to diagnose and guide gifted and talented students in an early stage.

According to the results of the second question, teachers focused on being noticed by the family and gifted and talented students' teacher, cooperation between School and Guidance Research Center, cooperation between School and Science Art Center. Also different researchers (Celikten, 2017; Lu et. al., 2017; Olszewski-Kubilius, 2018; Turalbayeva et. al., 2017) draw attention to this relationships for diagnostic process. The participants pointed out the feature of loneliness, the ability to focus on details, intrapersonal intelligence, analysis, creative thinking, leadership skills, and IQ scores of 130 and above from WISC-R intelligence test. Creative thinking and leadership abilities are the most prominent among them. Additionally gifted and talented students are most noticed by their teachers and that they are directed to the Guidance Research Centers in cooperation with the School and Science Art Center. Similarly most of the researchers (Duran & Daglioglu, 2017; Green, 2016; Laine, Kuusisto & Tirri, 2016) found that teachers have emphasized the same features of the gifted and talented students. Duran and Daglioglu (2017) showed that teachers focused on the human features and values of the gifted and talented students which are the similar with the results achieved in this research. Additionally Green (2016) found that teachers had the perception that the gifted and talented students had higher leadership performance than non-gifted and talented students. Also Laine, Kuusisto and Tirri (2016) emphasized that according to Finnish teachers' views, giftedness was seen to be multidimensional and a characteristic which differentiates the person from others. They also described giftedness via cognitive, creative, and motivational features of the gifted.

On the other hand, in the diagnosis process of the students, the most frequently mentioned form of evaluation was the intelligence test. As this result, most of researchers (Gallagher, 2015; refers the intelligence tests which are often used in the diagnosis of giftedness for the identification of gifted and talented students. For example, Gallagher (2015) mentioned Stanford-Binet Scale. On the other hand some researchers had used special tests for measuring the level of the gifted abilities. Such as verbal intelligence test (Fard et. al., 2016), emotional intelligence test (Zeidner, 2018). In Turkey researchers (Alkan, 2015; Saranli, Er & Deniz, 2017; Tasdemir & Ergul, 2015) mostly focused on WISC-R intelligence test in the process of diagnosis giftedness.

According to the third question of the research, for education and instruction of the gifted and talented students, in-service teacher trainings and instruction activities which should be arranged by taking into consideration the students'

intelligence and ability areas and directing the students, are necessities. In this context, the results obtained by the different researchers (Hemphill, 2009; Sahin, 2012; Sahin and Kargin, 2013) support the idea which is the positive attitudes and knowledge level of the gifted and talented have increased when the curriculum and instructional designs organized and applied for the teachers. For the gifted and talented students, they stated the benefits of the current educational process in Turkey as the possibility of education and instruction beyond the normal schools, education and instruction opportunities according to the interests of the students, low number of students both in the private classes for private schools and for the classes of Science Art Centers, providing material support and the possibility of education and instruction in private classes. They also mentioned mostly about the benefits of education and instruction in Science Art Center, out of school. Koc (2015), in his study, supports this idea with the results of which are useful in caring that gifted and talented students who are continuing to Science and Art Center can easily share their feelings and thoughts with their families, friends and teachers. They expressed the limitations as inadequate education and instruction and the need to develop teachers. Different researchers (Akar & Uluman, 2013; Alemdar, 2009; Chan, 2001; Gokdere & Ayvaci, 2014; Inan, Bayindir & Demir, 2009) have concluded that teachers are insufficient in identifying and directing the characteristics of gifted and talented students. Regarding the limitations, it is focused mostly that teachers are inadequate and need to be developed for gifted and talented students. Battles (2007) also supports this idea by suggesting that the universities should educate new teachers with a better education program that allows them to understand the characteristics of gifted and talented students and offer more teaching opportunities. Participating teachers in terms of how the education process should be; they focused on the education and instruction of the students who were educated according to their intelligence and abilities, enriched with special content, offered the possibility of inventing, organized by taking into consideration the characteristics of intelligence and ability, progressing through stages and in individual homogeneous classes.

Regarding the education and instruction process of the gifted and talented students, in-service trainings and instruction activities, Christensen-Needham (2010), who emphasized the need of teachers for their inadequacy and development, concluded that the class teachers' personal knowledge of gifted and talented is low, but they have a positive attitude towards these students. In addition, teachers fear that they have spent little time with gifted and talented students, have limited personal knowledge and skills, have low level of expertise in supporting the social and emotional needs of them, in other words, they fear inexperience and to be insufficient in education program that have the need to prioritize the school for students other than gifted and talented students. In this context, Christensen-Needham (2010) also proposes to follow a special teaching program for gifted and talented students and to provide specialist instruction for classroom teachers. The researcher argues that the appropriate instruction for the gifted can only be achieved by providing maximum opportunity to develop and express one or more of the performance areas that can reveal the gifted potential.

According to the fourth question of the study, the participant teachers produced ten metaphors in three different categories of Renzulli's (2005) 1978 three

ring theory related to gifted students. While the most metaphor is produced in 'general and special talent (GST)' category. Very few metaphors were produced in the categories of 'motivation' and 'creativity'.

According to the fifth question of the study, the participant teachers produced a total of ten metaphors in three different categories of Renzulli's (2005) 1978 three ring theory related to talented students. While the most metaphor is produced in 'general and special talent (GST)' category according to Renzulli's (2005) 1978 three ring theory. Few metaphors were produced in the categories of 'motivation' and 'creativity'. When the metaphors produced regarding the concepts of 'gifted students' and 'talented students' are examined, it is seen that the metaphors produced for both concepts are mostly in the 'general and special talent' category of Renzulli's (2005) 1978 three ring theory. This pointed out that the metaphors of the concepts of 'gifted students' and 'talented students' are similar. Also the results obtained in the fourth and fifth questions of the study are similar with the results of the different researchers (Eraslan-Capan, 2010; Ozsoy, 2014; Kadıoglu-Ates, 2018).

When the metaphors of the participant teachers are categorized as 'gifted students' and 'talented students', it is seen that the 'general and special talent' category is common in each concept. When the metaphor categories related to the concept of 'gifted students' are examined, unlike the metaphor categories related to the concept of 'talented students', in the scope of general special talent, formance', 'large capacity' and investigating and looking at events differently' In other words, it can be said that the teachers differentiate 'the gifted students' with a intelligence score of 130 and above from the students who have 'the talented' with high performance, large capacity and the ability of investigating and looking at events different angles. In addition, when the metaphor categories related to the concept of 'talented students' are examined, different from the metaphor categories related to the concept of 'gifted students', teachers emphasized metaphors that reflect 'mysterious and endeavoring to understand' and 'versatile'. In this context, it can be said that the participant teachers differentiate the talented students from the gifted students with intelligence score of 130 and above by being 'mysterious and endeavoring to understand' and 'versatile' features. According to the result of this research, different researches (Duran & Daglioglu, 2017; Nar & Tortop, 2017) reached the similar results about the metafors on the concepts of 'gifted' and 'talented'. In the majority of studies in the literature, while the conceptual examination of the subject was conducted, metaphors about 'special talented' were collected to cover both concepts without distinction of 'gifted' and 'talented'. (Davis & Rimm, 1998; Eraslan-Capan, 2010; Kunt & Tortop, 2013; Neumester & etc., 2007; Ozsoy, 2014). In this context, in the different researches which have similar results with this research, the general and special abilities were emphasized in the metaphors related to the concept, such as being different from their peers, being in need of appropriate education, being valuable, being versatile, having large capacity, being mysterious, being a high performing person, etc. (Chan, 2001; Eraslan-Capan, 2010; Davis & Rimm, 1998; Neumester & etc., 2007; Ozsoy, 2014; Sahin, 2012; Winebrenner, 2000) were highlighted.

Recommendations

Based on the mentioned results, it is recommended that preschool and primary school teachers should receive trainings to recognize the characteristics of gifted and talented students, to cooperate with their families in order to understand the characteristics of the students, to follow related publications, and to arrange their education in accordance with the individual characteristics of gifted and talented students. Additionally it is recommended that for teachers to have training about organizing specific individual curriculum with enriched activities for these students. Also teachers should use special time allocations for the gifted and talented students who are trained with normal students in the instruction process and benefit from the support instruction rooms. On the other hand in literatüre, there are many research about the views and metafors on the concept of 'gifted', however there are limited researchs on the concept of 'talented'. Because of that reason, it is recommended that examining the views and metafors of the teachers on the concepts of 'talented'.

References

Achter, J. A., Benbow, C. P. & Lubinski, D. (1997). Rethinking multipotentiality among the intellectually gifted: A critical review and recommendations. *Gifted Child Quarterly, 41*(1):5–15. https://doi.org/10.1177%2F001698629704100102

Akar, I., & Uluman, M. (2013). Classroom teachers' ability to nominate gifted students. *Journal of Gifted Education Research, 1*(3), 199-212.

Alemdar, M. (2009). *Comparison of parent, teacher and expert opinions in identifying gifted children in early childhood (*Unpublished master's thesis). Gazi University, Ankara.

Alkan, A. (2015). Investigation of Teachers' Studies on Determining the Gifted Students. *Journal of Gifted Education Research,* 3(1), 54-65.

Altunisik, R., Coskun, R., Bayraktaroglu, S., & Yildirim, E. (2010). *Research methods in social sciences. Practiced SPSS.* Sakarya: Sakarya Publishing.

Al-zoubi, S. M. (2014). Effects of enrichment programs on the academic achievement of gifted and talented students. *Journal for the Education of the Young Scientist and Giftedness, 2*(2), 22-27. Doi: 10.17478/JEYSG.201429018

Baltaci, A. (2018). A conceptual study on sampling methods and sample volume problem in qualitative research. *Bitlis Eren University Journal of Institute of Social Sciences. , 7*(1), 231-274.

Battles, B. (2007). *Teachers' perceptions of the federal definition of gifted and talented. Kentucky Teacher Education.* Paper 3. http://digitalcommons.wku.edu/kte/3.

Bildiren, A. (2018). The interest issues of gifted children. *World Journal of Education, 8*(1), 17-26. Doi:10.5430/wje.v8n1p17

Celikten, Y. (2017). Gifted children and BILSEM. *Turkish Journal of Educational Studies, 4* (3), 87-104.

Cetin, A. & Dogan, A. (2018). The problems of Mathematics teachers who work in Science and Art Centers. *Ankara University Faculty of Educational Sciences Special Education Journal, 4,* 615-641. Doi: 10.21565/ozelegitimdergisi.370355

Cetin, S., Sahin, C., Mertol, H., Arcagok, S. & Girgin, D. (2017). Entrepreneurship capabilities of students in social studies: Comparison of Science and Art Center and primary school students. *Turkish Journal of Gifted and Education, 7*(2), 110-125.

Chan, D. W. (2001). Characteristics and competencies of teachers of gifted learners: The Hong Kong teacher perspective. *Roeper Review. 23(4),* 197-202. https://doi.org/10.1080/02783190109554098

Christensen-Needham, V. (2010*). Primary teachers' perceptions of the social and emotional aspects of gifted and talented education.* A dissertation submitted in partial fulfilment of the requirements for the degree of master of Teaching and Learning in the university of Canterbury, New Zealand.

Cooper, P. M. (2013) *Parents' perceptions of how they serve the social and emotional needs of their intellectually identified gifted children.* Texas Wesleyan University, ProQuest Dissertations Publishing, 3606132.

Creswell, J. W. (2015). *Qualitative research method: Research and research design according to five approaches*, (tra.. edit.) M. Butun ve S. B. Demir. Ankara: Ani publishing.

Davis, G. A. Rimm, S. B. (2003). Education of the gifted and talented. Boston, MA: Allyn ve Bacon.

Duran, A. & Daglioglu, H. E. (2017). The metaphoric perceptions of preschool teacher candidates regarding gifted children. *GEFAD / GUJGEF 37*(3), 855 – 881.

Eileen, S. (2018). The identifation of gifted children in Australia: The importance of policy. *TalentEd, 30*(1), 1-16.

Eraslan-Capan, B. (2010). Metaphorical perceptions of prospective teachers about gifted students. *International Journal of Social Research, 3*(12), 140-154.

Eren, F. Cete, A. O. Avcil, S. Baykara, B. (2018). Emotional and Behavioral Characteristics of Gifted Children and Their Families. *Neuropsychiatry Archive, June, 55*(2), 105-112.

Fard, E. K. Keelor, J. L. Bagheban, A. A. Keith, R. W. (2016). Comparison of the Rey Auditory Verbal Learning Test (RAVLT) and Digit Test among typically achieving and gifted students. *Iranian Journal of Child Neurology, 10* (2), 26-37.

Gagne, F. (1985). Giftedness and talent: Reexamining a reexamination of the definitions. *Gifted Child Quarterly. 29*(3), 103-112. https://doi.org/10.1177/001698628502900302.

Gallagher, J. J. (2015). Peer acceptance of highly gifted children in elementary school. *Journal for the Education of the Gifted, 38*(1), 51-57. https://doi.org/10.1177/0162353214565549.

Gokdere, M. & Ayvaci, H. S. (2004). Determination of primary teacher's knowledge level about giftedness concept. *The Journal of Ondokuz Mayıs University Faculty of Education, 18*, 17–26.

Green, S. A. (2016). *Teacher Perceptions Of Leadership Potential Of Gifted And Talented Students.* Unpublished Master Thesis. Education Degree Programme, Morgan State University, The United States.

Hemphill, A. N. (2009). *How teacher participation in the identification process impacts the under representation of minority students in gifted programs.* Unpublished doctoral dissertation, Southern California University, California.

Inan, H. Z., Bayindir, N. & Demir, S. (2009). Awareness level of teachers about the charecteristics of gifted childiren, *Australian Journal of Basic Applied Sciences, 3*(3), 2519-2527.

Kadioglu-Ates, H. (2018). Gifted children metaphor from the perspective of teachers and parents. *Journal for the Education of Gifted Young Scientists, 6*(2), 30-42. Doi: http://dx.doi.org/10.17478/JEGYS.2018.76.

Karabey, B. Yurumezoglu, K. (2015). A review for creativity and giftedness with perspective of intelligence theories. *Dokuz Eylul University Journal of Buca Education Faculty*, 40, 86-106.

Karatas, Y. & Saricam, H. (2016). The relationship between moral maturity and sense and behaviors of responsibility in gifted children. *Global Journal of Psychology Research, 6*(1):10–19. https://doi.org/10.18844/gjpr.v6i1.491

Kazu, I. Y. & Senol, C. (2012). Views of teachers about gifted curriculum (Case of Science andArt Center). *E--International Education Research Journal, 3*(2), 13-35.

Koc, I. (2015). Opinions of special gifted and talented students continuing to Science and Arts Center on communication skills. . *Journal of Gifted Education Research, 3*(1), 39-53.

Koksal, M. S. Gogsu, D. & Kilic, O. (2017). Gifted and talented development of properties in Turkey must be provided in terms of what? A stakeholder opinion study. *Turkish Journal of Gifted and Education, 7*(1), 2-18.

Kunt, K. Tortop, H. S. (2013). The metaphoric perceptions of gifted students about Science and Art Centers in Turkey. *Journal of Gifted Education Research, 1*(2), 117-127.

Kurnaz, A. (2013). Evaluation of Science and Art Centers in the twentieth year depending on the reports and directors' views. *Journal of Gifted Education Research, 2*(1), 1-22.

Kutlu-Abu, N. Akkanat, C. & Gokdere, M. (2017). Teachers' views on the education of gifted students in normal classes. *Turkish Journal of Gifted and Education, 7*(2), 87-109.

Laine, S. Kuusisto, E. Tirri, K. (2016). Finnish teachers'conceptions of giftedness. *Journal for the Education of the Gifted, 39*(2), 151-167. https://doi.org/10.1177/0162353216640936.

Leana-Tascilar, M. Z. (2016). An experimental study on planning capabilities of gifted and normal students. *Turkish Journal of Gifted and Education, 6*(2), 55-70.

Lee, L. (1999). Teachers' conceptions of gifted and talented young children. *High Ability Studies, 10*(2), 183-196. https://doi.org/10.1080/1359813990100205.

Lu, J. Li, D. Stevens, C. Ye, R. (2017). Comparisons and analyses of gifted students' characteristics and learning methods. *Gifted Education International, 33*(1), 45-61. https://doi.org/10.1177/0261429414565160.

Mastropieri, M., & Scruggs, T. (2000). *The inclusive classroom: Strategies for effective Instruction*. Colombus. OH: Merrill.

Mayorova, I. M. Fedorenko, M. V., Hakki, A. M., Salakhov, R. F. (2018). Personality characteristics of gifted students of creative specialty. *Revista Publicando, 5*(17), 322-329.

Miles, M. B. & Huberman, A. M. (1994). *An expanded sourcebook. Qualitative data Analysis.* Thousand Oaks, CA: SAGE Publications.

Muratori, M. C. & Smith, C. K. (2015). Guiding the talent and career development of the gifted individual. *Journal of Counseling & Development, 93*(2), 173–182. https://doi.org/10.1002/j.1556- 6676.2015.00193.x.

Nar, B. & Tortop, H. S. (2017). Resource room applications for gifted students in Turkey: Problems and implications. *Istanbul Aydin University Education Faculty Journal*, *3*(1), 85-99.

Neumeister, K. L. S. 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 For The Gifted, 30*(4), 479-499.

Olszewski-Kubilius, P. (2018). The Role of the Family in Talent Development. In Pfeiffer, S. (Ed.). Handbook of Giftedness in Children Psychoeducational Theory, Research, and Best Practices. Springer, Cham.

Olthouse, J. (2014). How do preservice teachers conceptualize giftedness? A metaphor analysis. *Rooper Review, 36*(2), 122-132. https://doi.org/10.1080/02783193.2014.884200.

Ozcan, D. (2017). Career decision-making of the gifted and talented. *South African Journal of Education, 37*(4), 1-17. https://doi.org/10.15700/saje.v37n4a1521.

Ozcelik, A. Akgunduz, D. Evaluation of gifted/talented students' out-of-school STEM education. *Trakya University Journal of Education Faculty, 8*(2), 334-351.

Ozdemir, M. (2010). Qualitative data analysis: A study of the methodology problem in the social sciences. *Eskisehir Osmangazi University Journal of Social Sciences, 1*(11), 323-343.

Ozenç, M. & Ozenç, E. G. (2013). The multidimensional examination of master-doctorial dissertations made in Turkey about gifted and talented students. *Turkey Social Research Journal, 171,* 13-28.

Ozsoy, Y. (2014). Science and Art Center students, teachers and parents metaphors on the concept of gifted students. *Journal of Gifted Education Research, 2*(1), 74-88.

Peterson, J. S. (2015). School counselors and gifted kids: Respecting both cognitive and affective. *Journal of Counseling and Development, 93*(2), 153–162. https://doi.org/10.1002/j.1556-6676.2015.00191.x

Renzulli, J. S. (2005). Applying gifted education pedagogy to total talent development for all students, *Theory Into Practice, 44*(2), 80-89.

Renzulli, J. S. (2011). What makes giftedness?: Reexamining a definition. *PDK International, 92*(8), 81-88. https://doi.org/10.1177/003172171109200821.

Resmi Gazete. MEB Özel Eğitim Hizmetleri Yönetmeliği 7 Temmuz 2018. http://www.resmigazete.gov.tr/eskiler/2018/07/20180707-8.htm 7.07.2019

Robins, J. & Chandler, K. (2013). *What works: 25 years of curriculum development and research.* Waco, TX: Prufrock Press.

Roeper, A., & Silverman, L. K. (2009). *Giftedness and moral promise.* In Morality, ethics, and gifted minds (pp. 251-264). Springer US. https://doi.org/10.1007/978-0-387-89368-6_19

Sahin, F. (2012).*The effectiveness of the training program to improve the level of knowledge of the class teachers about the gifted students and their characteristics* (Unpublished doctoral dissertation). Ankara University, Ankara.

Sahin, F. Cetinkaya, C. (2015). Investigation of the effectiveness and efficiency of classroom teachers in the identification of the gifted. *Turkish Journal of Gifted and Education, 5*(2), 133-146.

Sahin, F., and Kargin, T. (2013). The effect of a teacher's education on the level of kowledge of teachers about the identification of gifted students. *Ankara University Faculty of Educational Sciences Special Education Journal, 14*(2), 1-13.

Sak, U. Ayas, M. B. Sezerel, B. B. Opengin, E. Ozdemir, N. N. And Demirel-Gurbuz, S. (2015). A Critical evaluation of the gifted education in Turkey. *Turkish Journal of Gifted and Education, 5*(2), 110-132.

Saranli, A. G. Er, S. Deniz, K. Z. (2017). An analysis of language development in gifted preschool children. *Education for Life, 31*(1), 1-20. Doi: 10.15390/EB.2017.7062

Sternberg, R. J. (2003). A broad view of intelligence: The theory of successful intelligence. *Consulting Psychology Journal: Practice and Research, 55*(3), 139-154.

Tasdemir, O. M. & Ergul, C. (2015). The giftedness profile analysis based on WISC-R in Ankara city sample. *Ankara University Faculty of Educational Sciences Special Education Journal, 16*(3), 271-292.

Tavsancil, E. and Aslan, E. (2001). *Content analysis and application examples.* İstanbul: Epsilon Publishing.

Turalbayeva, A. T. Sultanbek, M. Utyupova, C. E. Aidarov, B. Zh., Uaidullakyzy, E. Zhumash, Zh. Uzunboylu, H. (2017). The general preparation of the training of elementary school and the family and the education of gifted children school in cooperation principles. *International Journal of Sciences and Research*, 73(4), 239-251.

Unal, F. and Er, H. (2015). Assessment of the opinions of gifted students about social studies courses. *Ahi Evran University Journal of Kirsehir Education Faculty, 16*(1), 165-182.

Unlu, Z. K. and Dokme, İ. Gifted children' images about STEM's E. *Trakya University Journal of Education Faculty, 7*(1), 196-204.

Winebrenner, S. (2000). The trials and tribulations of being gifted: Has gifted education changed over the years? *Understanding Our Gifted, 12*(4), 10-12.

Worrell, F. C. Subotnik, R. F. Olszewski-Kubilius, P. Dixson, D. D. (2019). Gifted students. *Annual Review of Psychology, 70,* 551-576.

Yildirim, A. & Simsek, H. (2008). *Qualitative research methods in the social science.* Ankara: Seckin Publishing.

Zeidner, M. (2018). *Emotional Intelligence (EI) and the gifted.* In: Pfeiffer S. (eds) Handbook of Giftedness in Children. Springer, Cham.

Authors' Biodata/ Yazar Bilgileri

H. Gülhan ORHAN KARSAK Kırklareli Üniversitesi Fen-Edebiyat Fakültesi Eğitim Bilimleri Bölümü'nde öğretim üyesi olarak görev yapmaktadır. Yüksek lisansını Marmara Üniversitesi Sınıf Öğretmenliği Bölümü'nde, doktorasını Yıldız Teknik Üniversitesi Eğitim Programları ve Öğretim Bölümü'nde tamamlamıştır. Doktora tezinde karma öğretim tasarımına dayalı bireysel ve işbirlikli blog ortamında, normal ve üstün zekalı öğrencilere yazma öğretiminin etkilerini araştırmıştır. Halen farklı yöntem ve tekniklerle bütünleştirilmiş öğretim teknolojilerinin etkileri, özel yetenekli öğrenciler için eğitim ve öğretim, öğretmen eğitimi, öğretim tasarımı, program geliştirme ve değerlendirme, akademik öz-yeterlik, yaratıcı drama ve okuma, yazma öğretimi konularında çalışmaktadır.

H. Gülhan Orhan Karsak is a faculty member at the Department of Educational Sciences, Faculty of Science and Literature, Kırklareli University. She completed her master's degree at Marmara University, Department of Primary School Teaching and his doctorate at Yıldız Technical University, Department of Curriculum and Instruction. In her doctoral dissertation, she researched the effect of using individual and cooperative blog to enhance average and gifted students' writing performance. She is currently working on the effects of instructional technologies integrated with different methods and techniques, education and training for gifted students, teacher training, instructional design, curriculum development and evaluation, academic self-efficacy, creative drama, reading and writing instruction.

Burak GİDER, Muş ili Milli Eğitim Bakanlığı'nda okul öncesi öğretmeni olarak görev yapmaktadır. Yüksek lisansını Kırklareli Üniversitesi Çocuk Gelişimi Bölümü'nde tamamlamıştır. Yüksek lisans tezinde bireysel ve işbirlikli dijital öyküleme uygulamalarının özel yetenekli öğrencilerin dil gelişimine ve yazma performansına etkilerini araştırmıştır. Özel yetenekliler, okul öncesi eğitim, dijital öyküleme, dil gelişimi ve yazma öğretimi alanlarında çalışmaktadır.

Burak Gider works as a preschool teacher at the Ministry of National Education in Muş. He completed his master's degree in the Department of Child Development in Kırklareli University. In his master's thesis, he investigated the effects of individual and collaborative digital storytelling on language development and writing performance of gifted students. He is currently works on gifted students, preschool education, digital storytelling, language development and writing instruction.