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Research Article

An Examination of Pre-service Classroom Teaching Programs in terms of Gifted Education in Turkey

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Abstract

It has been recently given importance that programs are prepared in consideration of individual differences of children with the need for special education. Even if it is especially thought that children with the need for special education are just physically or mentally disabled, one should recognize children whom we can actually call 'gifted' for them to be able to adapt to the classroom environment. Provided that the first-, second- and third-grade students are nominated by the classroom teachers as of the academic year of 2016-2017, they will be able to receive education at Science-Art Centers. Therefore, classroom teachers undertake an important task for identifying gifted children. Can teachers having such a great responsibility be trained to have that competence? The main purpose of this study is to investigate to what extent the subject 'gifted students' is included in the teaching plan during the eight-term education of pre-service classroom teachers. For this purpose, the websites of 193 universities registered to the Council of Higher Education were identified to examine 70 universities with a classroom teaching program. According to the findings, there is a course called 'special education' that handles the topics related to the gifted in 68 of those 70 universities, and in the rest, there is no course titled either 'special education' or 'gifted'. When the special education course is investigated, it is seen that objectives concerning the gifted take the last places and the contents addressing the gifted takes the third place. According to the learning acquisitions of the special

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education course, 'knowing about the characteristics of gifted children and educational applications for them' comes across as one of the least addressed topics. **Keywords**

classroom teaching; gifted education; special education course; course contents

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Introduction

Due to assuming important roles in ensuring the welfare of their societies, gifted children have gained importance today and become the subjects of one of the most investigated topics. Many developments that can be considered scientific milestones have been provided by gifted individuals, and by this means, the gifted have shaped the history. For example, contributions to the humanity by well-known individuals such as Albert Einstein, Leonardo da Vinci, Nicola Tesla and Al-Biruni who are known to be gifted are still of importance today. In addition, when one looks at the literature, there are gifted individuals who are neglected and lost just as there are gifted children who benefit the humanity (Dönmez, 2001). The fact that only 11.800 students have been able to be identified although there are 350-400 thousand gifted students on average in Turkey (MEB, 2012) is the most obvious indicator (Kurnaz, 2014).

Gifted children are defined as students who have been identified by experts to exhibit higher performance than their peers in terms of intelligence, creativity, capacity of art or specific academic fields and who need special education in those fields (MEB, 2007). Gifted children need special education due to their varying needs compared to the normal peers. Teachers should be trained in the quality and competency that can meet gifted children' need arising from personal and mental differences. When gifted adults are talking about teachers they could not forget about, they mention about the teachers who helped them shape their lives and made their differences known to others (Sak, 2010). Similarly, Gross (2005) stated that the best gift one can give to a gifted child is a teacher who is aware of his/her talent, enjoy striving for his/her development and make him/her happy rather than scaring (as cited in Keskin, Samancı and Aydın, 2013). In general consideration of educational-instructional environments, teachers need to identify such students and prepare suitable applications for them so that they can establish a positive classroom environment (Alkan, 2015).

Based on the idea that the fields of talent are yet to become clear among preschool children (Ataman, 2000), the earliest level in which gifted children can be identified is the elementary school. Classroom teachers play the most important role in diagnosing the gifted students in elementary schools. As a result of the diagnosing process, students nominated by their classroom teachers are entitled to receive special education they need at Science-Art Centers (SAC). Provided that the first-, second- and third-grade students are nominated by the classroom teachers as of the academic year of 2016-2017, they will be able to receive education at SAC. Accordingly, classroom teachers' abilities to identify gifted students become important. The earlier gifted children are identified and provided with the necessary special education, the more they can contribute to humanity. The most crucial task falling to the classroom teachers is to help diagnose the gifted and to offer in-class applications in accordance with their talents because the development of gifted children who are guided at early ages is a lot faster and those who are not guided may become destructive individuals that may harm themselves and others later (Akarsu, 2004). In this context, a classroom teacher should be able to know about gifted children's mental, physical, social, personal and occupational characteristics and evaluate them according to these characteristics (Çağlar, 2004).

About 104.617 (2%) of 5.230,878 students who attend the primary school in Turkey (MEB, 2015) is expected to be mentally gifted. However, total number of students attending both primary and secondary schools who are nominated for SSMs is 60.820 and the number of students who have been identified to be mentally gifted according to the individual intelligence test is 14,325'tir (Kılıç, 2010). Proportionally, classroom teachers can identify only 7% of mentally gifted children in their classrooms. Hence, it is necessary that classroom teachers are equipped with sufficient knowledge and skills on this subject. On the other hand, it was revealed by some studies that classroom teachers have insufficient knowledge about gifted students (MEB EARGED, 2008; İnan, Bayındır & Demir, 2009; Kurnaz, 2009; Akar & Şengil-Akar, 2011; Şahin, 2012) and need training on gifted students (Gültekin, Cubukçu & Dal, 2010). Similarly Hemphill (2009) stated that teachers' which are in different branches have insufficient knowledge about gifted education and one important subject that teachers have an important role to identification of the gifted children so there is need for increasing their knowledge of them (Hansen & Feldhusen, 1994; Rakow, 2011). According to Özak, Vural and Avcıoğlu (2008), one of the counseling and research center managers reported that the evaluations form are filled by classroom teachers and they do not believe the accuracy of those forms. Similarly, it was addressed in SAC's internal audit report that teachers in schools are not sufficiently informed of identifying gifted students, and therefore, students who are capable of being nominated may not be nominated, suffering consequently (MEB, 2010). Moreover, Zor and Köse (2015) revealed that classroom teachers have

little knowledge about SSMs and suggest that classroom teachers should be trained about the gifted children and SAC in trainings offered by MEB or SSMs.

Such trainings can be divided into two groups: Pre-service and in-service. However, how much coverage do this topic get in the programs of education faculties in terms of the pre-service training that will ensure the right guidance for teachers at the beginning of their teaching life? How well are classroom teachers informed of identifying gifted students and their education before their graduation from the faculties of education? Why are classroom teachers so unsuccessful about gifted children, the institutions where they receive education and identifying them? If their success increases after the training they have about the situation, what is the problem? In the light of the research questions above and the results, this study was conducted to investigate to what extent the subject 'gifted students' is included in the teaching plan during the eight-term education of pre-service classroom teachers.

Method

The survey model was conducted in this research because the aim was to reveal a situation and describe it as it is. The method used was the document review, which is one of the qualitative research methods. The document review includes the analysis of materials containing information about phenomenon or phenomena investigated (Yıldırım & Şimşek, 2011). The documents reviewed in the research are the teaching plans shared on the websites of classroom teaching programs of the faculties of education in Turkey.

Study Material

The classroom teaching programs to be examined in the research was chosen with the criterion sampling method, a purposive sampling method. The criterion sampling is based on studying all situations that meet a prespecified set of criteria. The criteria can be created by the research just as a list of criteria at hand can be used (Yıldırım & Şimşek, 2011). The accessibility of the eight-term teaching plans of classroom teaching programs on their websites and the objectives, contents and learning acquisitions of the courses within those teaching plans was established as the criterion by the researcher.

In this context, first of all, the websites of 193 universities registered to the Council of Higher Education were identified to examine 70 universities with a classroom teaching program. The eight-term teaching plans of these universities were studied to investigate the courses that can be associated with the gifted. In the second stage, it was investigated if the 'special education' course, which is generally a compulsory course in classroom teaching programs, is available.

Accordingly, the numbers of universities sharing the objectives, contents and learning acquisitions of the special education course on their websites are presented in Table 1.

Table 1. Numbers of universities sharing the purposes, contents and learning acquisitions on their websites

	Purpose	Content	Learning Acquisition
Number of Universities	39	42	42

According to Table 1, what were examined are the documents related to the special education course belonging to 39 universities who share the purpose, content and learning acquisition of the course and 42 universities who share only the course and learning acquisitions of the course on the websites of the universities that include the special education course in their eight-term plans in accordance with the European Credit Transfer and Accumulation System (ECTS).

Data Collection and Analysis

In accordance with the purposes of the research, the courses that may be related to students with special talents or gifted students in the classroom teaching programs of the universities in the study material. To obtain the data of the research, the websites of the universities determined between the dates 23.11.15 and 29.11.15 specified in accordance with the European Credit Transfer and Accumulation System (ECTS) were reviewed. Correspondingly, the courses in the programs were analyzed in terms of purposes, contents and learning acquisitions. To this end, the data were analyzed with the content analysis which is a systematical and repeatable technique in which some words of a text are summarized with smaller content categories through pieces of coding based on certain rules (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2009).

Findings

As the first finding of the research, it was found that 70 of the universities in Turkey have classroom teaching undergraduate program and only four of them (Anadolu University, Amasya University, Sinop University and Uludağ University) included the course 'gifted education' as an elective course in their eight-term plans.

On the other hand, it was determined that the rest of the universities except the two of them (Sakarya University and Yıldız Technical University) have the two-hour 'special education' course in their teaching plans. In total, it is seen that 68 universities included the special education course in their classroom teaching undergraduate program as a compulsory course. In some universities, the course is called 'inculsive and special education in elementary education', 'special education and inculsive', and 'special education in classroom teaching'.

The objectives, contents and learning acquisitions of the special education course as a compulsory course in the classroom teaching undergraduate programs of many universities were examined individually in terms of how much they cover the content

concerning the gifted and talented. Consequently, it was determined that the objectives of the special education course are mentioned on the websites of 39 universities. The results are shown in Table 2.

Table 2. Objectives of the Special Education Course in Universities with Classroom Teaching Undergraduate Programs in Turkey (N=39)

Frequency Objectives Percentage Providing teacher candidates with information and skills concerning 20.56 children with special needs Making teacher candidates comprehend basic concepts in special 14.89 21 Organizing the educational-instructional process of children in need of 15 10.63 special education Recognizing the domain of special education 8 5.67 Reasons for disability 8 5.67 Ensuring the family participation in special education 4.96 Providing teacher candidates with the ability to distinguish students with 6 4.25 special needs from their peers Understanding the characteristics of the disabled 5 3.54 Informing of the processes of diagnosis and evaluation 4 2.83 Informing of the inculsive applications 2.83 Explaining the historical development of special education 3 2.12 Informing of gifted children's characteristics and education 0.70 Others (laws and regulations, roles and responsibilities of teachers, 30 21.27 services of psychological counseling, support and education, responsibilities of Counseling and Research Centers (CRCs), effective cooperative process, applications across Turkey and the world, applications of special education in early childhood, emotional and behavioral disorders, characteristics and education of mentally, physically disabled, hearing, visually impaired children and children with communication disabilities, treatment methods) 100.0 Total 141

According to Table 2, it is seen that the objectives of the special education course in several universities primarily adopted the objectives specified by the Council of Higher Education for the course. In addition, the top three objectives of the course seems to be 'providing teacher candidates with information and skills concerning children with special needs' (20.56%), 'making teacher candidates comprehend basic concepts in special education' (14.89%), and 'organizing the educational-instructional process of children in need of special education' (10.63%). Other objectives are given under a single topic since they are included in the program of one course or two. There is only one objective articulated as 'informing of gifted children's characteristics and education' (0.70%) directly related to the gifted which is the focus point of the study.

The content of the special education course is given on the websites of 42 universities with classroom teaching program. Related results are presented in Table 3.

Table 3. Contents of the Special Education Course in Universities with Classroom

Teaching Undergraduate Programs in Turkey (N=42)

Content	Frequency	Percentage
Characteristics and education of mentally disabled children	34	6.08
Characteristics and education of hearing-impaired children	34	6.08
Characteristics and education of visually impaired children	34	6.08
Characteristics and education of children with language and	34	6.08
communication disorders		
Basic principles of special education	33	5.90
Characteristics and education of children with special learning disability	33	5.90
Characteristics and education of physically disabled children	32	5.72
Characteristics and education of gifted children	32	5.72
Characteristics and education of children with autism spectrum disorder	28	5.00
Definition of special education	26	4.65
Responses and role of family in special education	25	4.47
Historical overview of disability	23	4.11
Characteristics and education of children with attention deficit	21	3.75
hyperactivity disorder		
Causes of different types of inability	21	3.75
Status of special education in Turkey	21	3.75
Characteristics and education of children with ongoing disorders	20	3.57
Importance of early diagnosis and treatment	19	3.39
Foundations and institutions founded for this objectives	18	3.22
Characteristics and education of children with affect and behavior	9	1.61
dysregulation		
Applications special education in early childhood	9	1.61
Diagnosis and evaluation in special education	9	1.61
Inculsive applications	8	1.43
Laws and regulations	7	1.25
Other (characteristics, prevalence, educational applications,	29	5.18
Mathematical applications of different types of disability; increasing the		
social awareness, rarely-encountered disorders, children whose		
developments are under threat, psychological counseling and guidance,		
skill and concept teaching)		
Total	559	100.0

According to the contents of the special education course in Table 3, the most covered content is the characteristics and education of children with different disabilities. It is seen that the most covered topic during the term is the characteristics and education of children with mental, hearing, visual, and language and communication disabilities with 6.08%. It is followed by the 'basic principles of special education' and 'characteristics and education of children with special learning disability' with 5.90%. 'Characteristics and education of physically disabled children' and 'characteristics and education of gifted children' are the third most important content included in the plans with 5.72%. The least covered contents seem to be 'inculsive application' with 1.43% and 'laws and regulations' with 1.25%. The learning acquisitions of the special education course are given on the websites of 42 universities with classroom teaching program. Related results are presented in Table 4.

Table 4. Learning Acquisitions of the Special Education Course in Universities with Classroom Teaching Undergraduate Programs in Turkey (N=42)

Learning Acquisitions	Frequency	Percentage
Ability to discuss the special education and its foundations	35	12.68
Ability to explain suitable educational applications for different types of	28	10.14
disabilities		
Ability to explain the characteristics of different types of disability	21	7.60
Ability to design activities for families of the children in need of special	20	7.24
education		
Ability to explain the causes of different types of disability	15	5.43
Developing the skill of recognizing children in need of special education	15	5.43
Recognizing about agencies and institutions related to special education in	14	5.07
Turkey		
Laws and regulations concerning the special education in Turkey	10	3.62
Ability to explain the development of special education in Turkey	8	2.89
Ability to distinguish different types of disability	8	2.89
Recognizing about the prevalence of different types of disability	7	2.53
Ability to discuss the mainstreaming applications	7	2.53
Ability to discuss the problems encountered in different types of disability	6	2.17
Ability to explain the diagnosing process	5	1.81
Recognizing about the characteristics of mentally disabled children and	5	1.81
related educational applications		
Recognizing about the characteristics of hearing-impaired children and	5	1.81
related educational applications		
Recognizing about the characteristics of autistic children and related	5	1.81
educational applications		
Recognizing about the characteristics of visually impaired children and	5	1.81
related educational applications		
Recognizing about the characteristics of children with special learning	5	1.81
disability and related educational applications		
Recognizing about the characteristics of gifted children and related	4	1.44
educational applications		
Ability to explain the supportive services of special education	4	1.44
Ability to explain types and methods of evaluation of different types of	4	1.44
ability		
Other (physical disability, emotional and behavioral dysregulation, language	40	14.49
and communication, effective communication, precautions to be taken in the		
classroom environment, alternative evaluation methods, ethical rules in		
special education, skill and concept education, journals in Turkish about the		
field, developments across the world)		
Total	276	100.0

According to Table 4 presenting the learning acquisitions which students taking the special education course are expected to attain at the end of the term, they are expected to attain the ability to 'discuss the special education and its foundations with 12.68% in the first place. It is followed by the 'ability to explain suitable educational applications for different types of disabilities' with 10.14% and 'Ability to explain the characteristics of different types of disabilities' with 7.60%. The least considered contents are 'recognizing about the educational applications related to the characteristics of gifted children', 'ability to explain the supportive services of special education' and 'ability to explain types and methods of evaluation of different types of ability' with 1.44%.

Discussion and Recommendations

In this research, the objectives, contents and learning acquisitions of the teaching plans of classroom teaching undergraduate programs In Turkey related to the gifted individuals were investigated.

According to the findings, the course which contents are concerning the gifted in classroom teaching undergraduate programs is given in only four universities as an elective course. On the other hand, it was determined that the 'special education' course which addresses the topics related to the gifted is given as a compulsory course in 68 of 70 universities examined. It is understood that the rest two universities did not include a course titled either 'special education' or 'gifted individuals' in their eight-term plans.

The reason why the special education course is included in several universities' teaching plans as a compulsory course and its objectives, contents and learning acquisitions were separately investigated in terms of relation to the gifted children. In terms of the objectives, it is seen that the primary purpose is to 'provide teacher candidates with information and skills concerning children with special needs'. The objective of 'informing of the characteristics and education of gifted children' is among the least considered objectives with 0.70%. According to the objectives of the special education course, the most important is to provide information and knowledge about children with special needs. However, when one considers about this solution in terms that this is the only compulsory course through which classroom teacher candidates can be informed of gifted children in formal education it can be said that the objectives falls insufficient to inform them of the gifted.

As for the contents of the special education course, the most covered content is the 'characteristics and education of mentally, physically disabled, hearing, visually impaired children and children with communication disabilities'. It is followed by the 'basic principles of special education' and 'characteristics and education of children with special learning disability'. 'Characteristics and education of physically disabled children' and 'characteristics and education of gifted children' are the third most important content. It can be said that this is important for gifted children in terms of the content of the special education course.

Finally, as for the learning acquisitions of the special education course, the 'ability to discuss the special education and its foundation' seems to be the most important attainment while 'knowing about the characteristics of gifted children and related educational applications' comes across among the least important ones. It can be said it is worrying that the gifted children and their characteristics are covered on a very low level as 1.44%.

In the light of these results, the fact that classroom teachers have lack of knowledge about gifted children (MEB EARGED, 2008; İnan, Bayındır & Demir, 2009; Kurnaz, 2009; Akar & Şengil-Akar, 2011; Şahin, 2012), and they experience

difficulty in nominating the right candidates so that they can receive education at SSMs (MEB, 2010; Zor & Köse, 2015) come across as a natural consequence. Similarly Ergin, Akseki and Deniz (2009), found that pre-service classroom teachers several needs in their in-service education. These are prior on the subjects of respectively; attention deficit, learning disability, hyperactivity and educational technology but also they mentioned about to take a course about gifted education. Erakkuş and Musayev (2014) asserted that education of gifted children should be added in pre-service classroom teachers' education programs. One another research result found that psychological counseling and guidance teachers' attitudes were higher than several other programs (such as pre-service classroom teachers, science teachers etc.) because of their education programs have more courses about gifted education (Tortop & Kunt, 2013). Sahin and Levent (2015) was stated that preservice classroom teachers lack of gifted education due to there is no compulsory course about in gifted education in education programs. The only course that preservice classroom teachers can take during their eight-term education in several universities seems to be the special education course. On the other hand, as stated in the results of the research, it is seen that the topics related to gifted individuals are the least covered ones in the purposes and learning acquisitions of the course.

It was revealed that teachers have more knowledge about the gifted through trainings provided to the teachers of gifted students (Tortop, 2014; Kontaş, 2009), preschool teachers (Kıldan, 2008; Kıldan & Temel, 2008; Şahin, 2012), and classroom teachers (Büyükcan, 2008; Şahin 2012; Alkan 2013). In addition, Alkan (2015) stated that teachers who received training related to the gifted education exhibit better instructional skills in the gifted education and provide a more positive classroom environment. In consideration of these findings, it is thought that it would be useful to include course or courses focusing on the gifted in the classroom teaching undergraduate programs in Turkey.

Moreover, in-service seminars can be organized on certain dates every year so that teachers can improve their knowledge and diagnosing skills related to gifted students. Studies can be performed to determine how successful the classroom teachers who received trainings about identifying and nominating the gifted properly are.

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