



Research Article

Investigating the Preschool Training for Gifted and Talented Students on Gifted School Teachers' View

Gizem COSAR¹, Caglar CETINKAYA² and Cagdas CETINKAYA³

Received: 23 March 2015

Accepted: 27 April 2015

Abstract

In this study, it was aimed to investigate the view of gifted school teachers on educating the preschool-aged gifted and talented students. Study is grounded as a case-study which is a method in qualitative research area. Data is collected with semi-structured interview questions from 10 different gifted school teachers working in Balikesir, Turkey. Three different questions were posed during semi-structured interviews to clearly introduce the view of teachers. According to analysis results; it was achieved that all participants believe the necessity of an education for gifted and talented students starting from the preschool age. Beside this necessity, teachers were emphasized that given education should be supported with a proper curriculum, physical structure (buildings & classes, science & art materials etc.) and improved knowledge (in the field of educating preschool aged gifted and talented students) of the teachers. When the responses of teachers for 3 different questions were assessed, teachers which are working for the education of gifted and talented students(out of preschool age) are affirming their opinions that the education for the gifted and talented students should be started to given in preschool age.

Key words

Gifted and Talented Children, Preschool Education, Gifted School (Science and Art Center)

To cite this article:

Cosar, G., Cetinkaya, C., & Cetinkaya, C. (2015). Investigating the preschool training for gifted and talented students on gifted school teachers' view. *Journal for the Education of Gifted Young Scientists*, 3(1), 13-21. DOI: <http://dx.doi.org/10.17478/JEGYS.2015110747>

Journal for the Education of Gifted Young Scientists (JEGYS) covers issues such as differentiated instruction in mathematics, science and social sciences for gifted students, education and training of the young scientist, giftedness, gifted education, scientific creativity, educational policy on science and math education for gifted students, teaching of the history and philosophy of science, teaching techniques and activities in the education of the gifted young scientist, is a scientific and academic journal. JEGYS aims to be a scientific media sharing scientific research, practices, theories and ideas about gifted education and education of the gifted young scientist. The JEGYS is an international refereed scientific journal which publishes review and research article, teaching techniques and activities for the education of the gifted young scientist, book reviews and interviews in Turkish and English. Submitted articles are evaluated in a double blinded peer-reviewed fashion. The JEGYS is an open access journal, published two issues a year. The JEGYS holds copyrights for all articles published in the journal. Authors are responsible for article contents published in the journal.

INTRODUCTION

Intelligence is the changing & renovation power of mind. According to Gardner, intelligence is the talent to solve a problem or forming a product in different cultural environments. His Multiple Intelligence Theory includes 7 different intelligence areas as; musical, spatial, kinesthetic, mathematical, linguistic, interpersonal and

¹Master's Student, Dumlupinar University, Institute of Educational Sciences, Kutahya, Turkey. E-mail: gizem.cosar@ogr.dpu.edu.tr

²UYCEP, International Gifted Children Education Program, Baku, Azerbaijan. www.uycep.com E-mail: caglar.cetinkaya@yandex.com

³ Master's Student, Dumlupinar University, Institute of Educational Sciences, Kutahya, Turkey. www.cagdascetinkaya.com E-mail: cagdas.cetinkaya@yandex.com

intrapersonal forming the intelligence (Gardner, 1993). As to, Talent is identified as power of learning in any area, to be powerful doing any task, capacity of problem solving, learning of mind and benefit from learning, adapting to & finding solutions to new circumstances.

In Ministry of National Education's SACs Directive, "gifted and talented child / student" is defined as children/students that shows higher performance than their peers in the fields of intelligence, creativity, art, leadership capacity or special academic areas where this performance determined by experts (Çetinkaya, 2013). Gifted and talented children who has at least two-year higher intelligence talents according to their peers and performs extraordinarily in one or two areas in music, plastic arts, painting, science etc. (Kıncal, Abacı, Çetinkaya, Usak & İnci, 2013). As in another definition; gifted and talented children is defined as children & the youth that when compared with his/her age, environment and experience who performs visibly higher performance or shows the potential (US Department of Education, 1993).

In our day competence in science and technical field is called as "Gifted" and where the term "Talented" is used mainly in arts. With this information, on 1991 in the report of Talented Child and Their Education Commission (in first council of Ministry of National Education – Special Education) Gifted and Talented terms are collected under "Talented" term and its definition is expressed as: Talented children are the person whose general and/or special competence performance is higher when compared with their peers where determined by the consultants. Talented are the group who needs differentiating programs according to these talents (Bencik, 2006).

One of the most debatable points about education of gifted and talented students is that how old they start to receive special education. It is commonly accepted idea among educators and experts that preschool education plays crucial role for pupils and is seen that an investigation which has to be made definitely. Since the education of gifted and talented students is brand new and still developing area, there are some gaps on it; the group of preschool age students is more vulnerable to be neglected. Therefore, investigating importance of preschool training for students has become a necessity.

Education of Gifted and Talented Students of Pre-School Age:

Many states which might be the signs of giftedness could be determined with regard to information in early childhood and pre-school age which received from mothers & fathers. Parents have information about their child's interests and typical behaviors in any situation by observing them everyday (as an example; by observing them in communication with adults or their reactions to familiar and unfamiliar situations). According to parent observations regarding their children's development, there are significant behaviors at the early stages of children (first months and even first weeks). By taking into consideration that the parents are first educator of children, being aware of the clues (from their children) is showing great importance to understand their gifted and talented child's interests and improvements, to support their children and to develop children's identity for being a coherent person (Baykoc-Donmez, 2004; Ogurlu & Cetinkaya, 2012; Pfouts & Schultz, 2003).

Gifted Schools are the educational centers where training (proper to their interest and talent) is given to gifted and talented students (primary and high school aged) out of formal training time. Students who are determined as "gifted and talented" receive education in these centers from related consultants (Baykoc-Donmez, 2004; Snowden & Christian, 1998). Gifted schools accept their students from primary school age especially from second or third classes. In current status, there is no program for preschool age group of talented students. Gifted and talented children have different needs coming from their specific characteristics. Training needs are also one of these needs. Receiving a proper education is a fundamental right of talented students as an individual/as a child. Content of this training has to be organized according to their learning speed and principles (Levent, 2011) In this study, it was aimed to investigate view of gifted school teachers regarding giving education to gifted and talented students in pre school age.

As the gifted school teachers have opportunity to observe gifted and talented students in primary school age, their assessments as per preschool-age education (which could be considered as preparation for primary school education) have significant importance. Also assessments regarding to determine talents of these students in early childhood could present the view of teachers about "what is the most suitable age to make education of talented students started?"

Interview questions which were conducted in study have been prepared as to receive different view and assessment of teachers and presented in Annex-1. It was assumed that participants answered study's semi-structured questions with sufficient accuracy and motivation. This study is limited with the investigation of 10 teachers' responses who are working in Balikesir Gifted School in 2013-2014 education periods.

METHOD

Research Model

In this research, case Study method that is one of methods in qualitative research area was used. Case study is research method which is used in researches in social sciences. It's general definition; case study is a research method that studies an actual event in its own & real living environment where the boundaries of event and its environment are not distinct and more than one evidence or data source is in place (Şimşek & Yıldırım, 2003). The reason why teachers who are currently working for the education of gifted and talented students is closeness & connection of teachers with children and their ability to trace children's development characteristics.

Participants

Study group were formed by 10 teachers who are working in Balıkesir gifted school on 2013-2014 education period. Representative information as per gifted school teachers where their views were collected during the study are given in Table 1.

Table 1. Base information regard study group

No	Gender	Department	Seniority (Year)	Graduate Level
A	Female	English	6-10	Master Degree
B	Female	History	6-10	Bachelor's Degree
C	Female	Turkish	1-5	Bachelor's Degree
D	Female	Science	6-10	Master Degree
E	Female	Science	1-5	Bachelor's Degree
F	Female	Science	6-10	Master Degree
G	Female	Visual Arts	11-15	Bachelor's Degree
H	Female	Turkish	11-15	Master Degree
I	Male	Mathematics	11-15	Master Degree
J	Male	Social Sciences	6-10	Master Degree

Data Tools

In order to respond study problem, essential data were collected by semi-structured interview questions. In data collection form, record fields were formed for teachers' base information on gender, department, seniority and graduate levels. As its copy is demonstrated in Annex-1, below mentioned 3 questions were posed with interview form;

- Do you think preschool education makes difference on gifted and talented child?
- What are the competencies of preschool teachers in case that they educate the gifted and talented students in preschool age?
 - Academic competencies?
 - Social competencies?
- What kind of differences can be predicted if talented students start to attain special education in preschool age?

With the posed questions, views of teachers were collected as per essentiality of such kind of education initially and then after it was investigated that what kind of benefits would "teachers" and "students" would gain from this education.

FINDINGS

During the interviews, answers & responses which were declared by gifted school teachers were recorded onto interview form. Answers of 3 posed questions are given below;

- Q1: Do you think preschool education makes difference on gifted and talented child?

When given responses are analyzed, whole participants believe that an education starting at preschool age is requirement for gifted and talented students. By this essentiality, teachers were declared that such education should be supported with curriculum, physical infrastructure and specific information of teachers (with supplementary trainings). Additionally teachers were believed that as in their peers, gifted and talented students would be also more successful in primary school if they attain an education in pre-school. In given responses, as a counter-view there were any opinions that pre-school education for gifted and talented students is not required.

When specific emphasis points are analyzed on the basis of teachers; the statement “experience many data beginning from their early childhood” which was given by Teacher-A is remarkable. The fact that talented students’ curiosity towards obtaining information is higher than their peers and meeting this need specifically coincide with correct assessment of their capacity. By teacher-B the importance for completing essential requirement (materials, class, education of teacher etc) related to education was expressed and it was declared that such training without completing the essentials would have more disadvantages. The difficulties as per to identify gifted and talented students in pre-school age was expressed by Teacher-C but the essentiality of such training was expressed with the evidence of fast improvement in development zones.

The importance of pre-school education for all children and the notion that children who have pre-school education would be more successful when compared with their peers was expressed by Teacher-D. In this context, importance of pre-school education for all children was emphasized. By Teacher-E, gifted and talented students’ desire to have information(as also expressed by Teacher-A) collected with the view that pre-school age is the formation period of many habits(also learning habits) and the essentiality of pre-school education of gifted and talented students was mentioned. An education program which is prepared for gifted and talented student in pre-school age appeals to children in early period, its essentiality reflected by Teacher-F.

It was expressed by Teacher-G that since intelligence development is quite fast in preschool ages, starting to receive education at that times is beneficial. Also, formation of child’s character in early ages (as expressed in term “habits” by Teacher-E) and belief onto the important role of this children in our country’s future was resulted by Teacher-H the essentiality of pre-school education. The essentiality of completing the pre-requisites (initially infrastructure) beside the essentiality of pre-school education for gifted and talented students were shared views of Teacher-I and J. As the same emphasis was made by Teacher-B, it was clearly found that gifted school teachers are believing the essentiality of pre-school education for gifted and talented students as well the necessity of completion all pre-requisites before starting such a kind of education.

- Q2. What are the competencies of preschool teachers in case that they educate the gifted and talented students in preschool age?
 - Academic competencies?
 - Social competencies?

Generally, gifted school teachers believe that completing educational processes with preschool age training, as a supplementary one, is beneficial for talented students in terms of bot socially and academically. Regarding this question; one teacher (Teacher-D) does not express an opinion and where two teachers expressed negative view (Teacher-C expressed that an effective education could not be supplied even a supplementary training is given and Teacher-F said that he does not want have a class from pre-school age). Common point for both 2 negative views is the importance of personal interest and familiarity to education of pre-school age. Also the view of Teacher-H “it is better to give such kind of task to teachers who have specific education for pre-school education and have academic career in this field” is remarkable.

When the responses were investigated separately, Teacher-A stated that all students enrich their teacher and expressed that an education for pre-school age would broaden horizons. By Teacher-B it was emphasized that teacher would bring innovations by becoming sufficient to educate students from pre-school age. It was stated by Teacher-C that there are many benefits of giving education to talented students via completing supplementary tranings, these benefits were listed in detail. But it was stated that personal properties of the teacher would be so important in this field and regard to this all teachers would not be successful. By teacher-D any opinion/view is declared.

Common view of Teacher-E and Teacher-F was such kind of education would increase the communication with child and with the families. By Teacher-G, possible benefits are expressed in clauses and especially

“Development of Personality” was emphasized. The view which is expressed by Teacher-H is more detailed for this question. It stated that an education for gifted and talented students from pre-school age should be given by teachers who have specialized training on this field and have academic career. A similar emphasis was done by Teacher-J. Assessment which was done by Teacher-I was also similar with Teacher-G and “Development of Personality” was emphasized.

- What kind of differences can be predicted if talented students start to attain special education in preschool age?

No	Response
A	From time to time I observe that the special education for my current students would enhance their ego a little bit. In this concept, a question “could some negative effects seen?” formed in my mind. I suppose that parents should have such kind of training (to be able to manage their children’ ego). If this could be sustained, with correct guidance and supportive attitudes, such kind of pre-school training would be helpful for children.
B	Children whose have interest in different areas (music, science, painting etc.) could be supported. If these children are supported from pre-school age, why they don’t be a famous painter, musician or scientist? But for now with current curriculum we are educating children not specifically (like all children doing same activity, no specialization in individual based etc).
C	Talents of my students would come up much more. They would have more information about their interest areas and talents. Maybe in future they would select their jobs according to these interest areas and talents.
D	In pre-school education children learn sharing, socialization and cooperation. One aim of preschool education is making existing talents of child visible. When this information is taken into consideration, the importance of having a specialized training in preschool age would be understood.
E	Positive attitudes: problems that rooted from adaption with environment and friends would not be seen, both teacher and student would be more comfortable. Negative attitudes: return of gained negative behaviors. It would be so difficult to change these behaviors in future..
F	Positive differences would be shown.
G	-They would be different socially (their senses regard self-expression and understanding the other would be developed.) - Differences in self-confidence, - Differences in linguistic development. - Differences in self-care skills, - Differences in to be prepared for primary school and future..
H	I have no idea about this question.
I	If my students would have some theoretical information from the beginning of preschool I could establish more dense relation with them and we could perform more different projects. For now I do not found a negative effect.
J	Positive effects would be much more. If my students would start their special education from 4 years old (when their talent level is top high), their current success would be higher. As a negative effect, in preschool age all children might be more creative by playing games, singing songs and doing different activities. An education program which could be classified as theoretical would affect children’s creativity negatively.

As per posed question about “What would be the differences if your current gifted and talented students could receive a special education in preschool age?”, most of the teachers responded that positive contribution would be gained. Only Teacher-A was chary of “might a special education increase the ego of child?”. Teacher-B emphasized the development about children’ interest areas. Similarly by Teacher-C, contribution (development children’ talents) which would obtain by such training mentioned.

DISCUSSION and CONCLUSION

In this study, which is based on case study method, the reason why teachers who are currently working for the education of gifted and talented students is closeness & connection of teachers with children and their ability to trace children's development characteristics. It could be assessed that the main reason of taking common & similar answers to 3 posed questions is academic background of the teachers in this field.

When responses of the teachers are analyzed, gifted school teachers who are responsible for the education of gifted and talented students (from primary and high school level) express their view as per "special education of gifted and talented children should be started from pre-school age".

When related literature is investigated, there are some studies which are based on view of gifted school teachers. In the study of Ozkan (2009), views of students, teachers, parents and managers were taken to examine the organizational effectiveness of gifted schools. Also by the study of Yumus (2011) teachers' view were analyzed to be able to identify if gifted schools are functioned according to their goals. Again on 2011 in study of Yagli, teachers and managers' views were collected regard structure and possible reconstruction of gifted schools.

Talas and friends were examined the problems which gifted and talented students were facing in their mainstream schools and they put forward suggestions to solve such problems (Talas, Talas & Sönmez, 2012). In this concept, there are some studies in the literature regard functioning of gifted schools. But any case study could be identified as per the education of gifted and talented students in gifted schools from pre-school age (which is also taking a part in foundation of gifted school).

In study of Leana-Tascilar (2014); an Actiotope Model of Giftedness were introduced to the Turkish researchers for creating a new perspective for the gifted education in Turkey with underlying the importance of mentorship, parental training, self-regulated learning, and planning. In this study, it was mentioned that education of gifted and talented students is a social responsibility for Turkey. Additionally it was stated that more holistic and broader perspective studies would be necessary to improve the excellence level of gifted and talented students.

In Sak's study (2011) a number of misconceptions, dogmas and popular beliefs about giftedness and intelligence and their associations with educational status and age were investigated. The findings of study were striking in that a substantial number of the participants expressed agreements with the statements related to misconceptions, dogmas and popular beliefs. Both educational status and age were found to be either negatively or positively associated with most of the misconceptions and dogmatic and popular beliefs.

In Gifted and Talented Students Report which was published by Ministry of National Education in 2009 within MEGEP Project (Project on Consolidating the System of Vocational Education and Teaching); it was stated that validity and reliability of methods which are using for identification of gifted and talented students in preschool age are low. And in that concept, it was stated that main role for the education of gifted and talented student is hold by families.

Teachers whom views are taken within this study have the opportunity to observe gifted and talented students during their education & activities. As all teachers whose are responsible from the education for talented students presented the essentiality of education of gifted and talented students in pre-school age, this should be noted as remarkable. It was analyzed that major portion of the teachers support their responses with the opinion that "cognitive development of students are utmost high in pre-school age". With these supporting views, it might comment that the view of study group would also generalizable.

Beside this study where gifted school teachers views were collected as per the essentiality of education of gifted and talented students in pre-school age, it would be interpreted that notable results as per such education would be obtained from pilot schemes that compares different development characteristics of gifted and talented students who have and not have a special education in pre-school age.

In setting-up instruction of gifted schools, an education activity for pre-school age was also included, however in current practices this is not applied in gifted schools. Because of this reason, for upcoming studies subjects like; implementation fundamentals of preschool education of gifted and talented students, positive & negative effects in foreign examples and necessities for the practices in gifted schools would be analyzed.

When education of gifted and talented students who are at pre-school age is considered, it would be assessed that education (which includes to does and not to does) and sources for the families (educational materials, materials that includes supplementary info etc.) are limited despite the key role of families is expressed in different sources. In this concept, it would be proposed that information as per such guidance for families would be in scope of upcoming academic researches.

Additionally; current situation of teachers which has also an important role in the education of students would be assessed as similar with families. It could be analyzed that curriculum and course & activity sources which will be used in the education of gifted and talented students in pre-school age should be described. Also,

it should be taken into consideration that before implementing such education system, teachers would also need some supplementary & professional training. Within this concept, some studies would be needed as per the content of such training for the teachers.

When all factors are considered, essentiality of education of gifted and talented students in pre-school age is mentioned even in the foundation regulation of gifted school and presented in this study with the views of teachers, it would be proposed that much more supplementary academic & professional studies might be needed before starting such educational system.

REFERENCES

- Baykoç-Dönmez, N. (2004). Üstün yetenekli çocukların eğitimlerinde bilim sanat merkezlerinin kuruluşu ve işleyişinde yapılması gereken düzenlemeler. İstanbul: *Üstün Yetenekli Çocuklar Bildiriler Kitabı, Çocuk Vakfı Yayınları*, 69-73.
- Bencik, S. (2006). *Üstün yetenekli çocuklarda mükemmeliyetçilik ve benlik algısı arasındaki ilişkinin incelenmesi*. Yayınlanmamış Doktora Tezi. Hacettepe Üniversitesi. Sosyal Bilimler Enstitüsü, Ankara.
- Çetinkaya, Ç. (2013). Sakarya science and art center nature education programme. *Journal of Environmental Protection and Ecology JEPE*. 14 (3A), 1317-1324.
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. NY: BasicBooks.
- Kıncal, R., Abacı, R., Çetinkaya, Ç., Uşak, M. & İnci, G. (2013). Unusual topics in preschool gifted and talented children. *International Journal of Educational Science*. 5(3), 179-186.
- Leana-Tascilar, M.Z. (2014). Developing excellence in gifted children: adaptation of Actiotope Model of giftedness for Turkey. *Journal for the Education of the Young Scientist and Giftedness*, 2(1), 18-32. DOI: <http://dx.doi.org/10.17478/JEYSG.201429010>
- Levent, F. (2011). *Ustun yetenekli cocukların hakları*. İstanbul: Çocuk Vakfı Yayınları, Yayın No: 87.
- M.E.B. (2007) .. Bilim ve Sanat Merkezleri Yönergesi,
- Oğurlu, U. & Çetinkaya, C. (2012). Identification of preschool gifted children characteristics based on parents?. *The Online Journal of Counseling and Education*. 1(3), 41-56.
- Özkan, D. (2009). Yönetici, öğretmen, veli ve öğrenci görüşlerine göre bilim ve sanat merkezlerinin örgütsel etkililiği. Yayınlanmamış Yüksek Lisans Tezi. Ankara Üniversitesi. Eğitim Bilimleri Enstitüsü, Ankara.
- Pfouts, B.R. & Schultz, R.A. (2003). The benefits of outdoor learning centers for young gifted learners. *Gifted Child Today*, 26 (1), 56-63.
- Sak, U. (2011). Prevalence of misconceptions, dogmas, and popular views about giftedness and intelligence: a case from Turkey. *High Ability Studies*, 22 (2), 179-197.
- Snowden, P.L. & Christian, J.G. (1998). 4 Levels of learning centers for use with young gifted children. *Gifted Child Today Magazine*, 21 (5), 36-41.
- Talas, S., Talas, Y. & Sönmez, A. (2012). Bilim sanat merkezlerine devam eden üstün yetenekli öğrencilerin okullarında yaşadıkları problemler. Tokat Bilim Sanat Merkezi Dokümanları.
- US Department of Education, 1993, www.nsgt.org , Erişim: 29.11.2013
- Yağlı, Ş. (2011). Yönetici ve öğretmen görüşleri çerçevesinde bilim ve sanat merkezlerinin yapısı ve yeniden yapılanması: İstanbul bilsem örneği. Yayınlanmamış Yüksek Lisans Tezi. Yeditepe Üniversitesi. Sosyal Bilimler Enstitüsü, İstanbul.
- Yıldırım, A. & Şimşek, H.(2003). *Sosyal bilimlerde araştırma yöntemleri*. Ankara: Seçkin Kitabevi.
- Yumuş, A. (2011). Bilim ve sanat merkezlerinin amacına uygun işleyişinin merkez öğretmenleri tarafından değerlendirilmesi. Yüksek Lisans Tezi. Kırıkkale Üniversitesi. Sosyal Bilimler Enstitüsü, Kırıkkale.

ANNEX-1 Interview Form

Gender: Male() Female()
Branch:
Seniority: 1-5 Year() 6-10 Year() 11-15 Year() 16-20 Year() 21-25 Year() >25 Year()
Graduate Level: Bachelor() Master()
Q1: Do you think preschool education makes difference on gifted and talented child?
Q2: What are the competencies of preschool teachers in case that they educate the gifted and talented students in preschool age? <ul style="list-style-type: none">○ Academic competencies?○ Social competencies?
Q3: What kind of differences can be predicted if talented students start to attain special education in preschool age?