

# The Role of Teacher and Family Opinions in Identifying Gifted Kindergarten Children and the Consistence of These Views with Children's Actual Performance

H. Elif DAĞLIOĞLU<sup>a</sup>

Gazi University

Senem SUVEREN<sup>b</sup>

Abdüssamet Dik Preschool

## Abstract

This study was conducted in order to identify gifted children attending kindergartens of elementary schools, determine how successful families and teachers were in selecting these children, and see how consistent their opinions were with children's actual performance. Participants were children attending kindergartens of elementary schools, their teachers and parents. The identification procedure used in the first stage of this relational survey study involved Parent Observation (POF) and Teacher Observation Forms (TOF) for teachers and/or parents to nominate potentially gifted children, the Primary Mental Abilities Test 5-7 (PMA 5-7) in the second stage and Goodenough-Harris Draw-a-Person Test for children. A total of 113 children out of 600 kindergarteners in central Düzce were nominated by their teachers and/or families, went through the identification procedures, and constituted the sample. This research indicated that teacher and parent opinions had a 44.3% success rate in determining gifted children (50 children). It was found that families were better than teachers in identifying gifted children; teachers made more realistic evaluations of children's performance as shown by tests and scores; but children's actual performance was much better than teacher and family opinions. No meaningful relationship existed between the PMA 5-7 and Goodenough-Harris Test scores of children who were identified as gifted. The Goodenough-Harris Draw-a-Person Test was included in the study to support the results of the PMA 5-7 Group Intelligence Test. The lack of a relationship between scores obtained from these two may be attributed to the facts that Turkish children started preschool education with a delay and were generally given little or no chance by their families to practice activities for thin motor muscle development on their own.

## Key Words

Pre-school Period, Gifted Children, Identification of Gifted Children.

\* This research is produced from Senem Suveren's master thesis.

a H. Elif DAĞLIOĞLU, Ph.D., currently an assistant professor at the Department of Preschool Education. Her research interests gifted children's identification and education, preschool children's drawing development, teacher competencies. *Correspondence:* Gazi University, Faculty of Gazi Education, Preschool Education Department, Teknikokullar, Ankara/Turkey. E-mail: edagliolu1@gmail.com Phone: +90 312 202 8151.

b Senem SUVEREN, M.A., Abdüssamet Dik Kindergarten Kaynaşlı, Düzce/Turkey.

Child development is considerably fast during the pre-school period which covers 0-6 years (Ari, 2003; Oktay, 2000). Therefore, it is important to monitor during this period whether children have the developmental features in line with normal development standards. Although children with special needs who develop differently than other children require special treatment, they show many similarities in terms of educational opportunities they should be offered (Metin, 2000). It is not only a necessity but an obligation to identify potentially gifted children in the preschool period during which development is at its fastest and to enable them to maximize their abilities, interest and skills (Dağlioğlu, 2010).

## Giftedness

From the Enderun Schools established during Ottoman times until the 1869 study by Galton on the concept of “intelligent”, no significant development occurred around the world in this field. In early studies, the superiority of intelligence (IQ) led to the terms *intelligent* and *gifted*, while people good at arts and music were labelled *talented* (Enç, Çağlar, & Özsoy, 1975; Merrill & Orlansky, 1984). A pioneer in the field, Terman (1925) defined top 2% scorers of standard intelligence tests as “intelligent”. Based heavily on IQ classification, this type of labeling lost its importance starting from the mid-20<sup>th</sup> century when scientists started to evaluate intelligence holistically and developmentally (Akarsu, 2001).

Chronologically, the education of gifted children started in 1972 in the US with a report revealing the minimum standards in most states (Marland, 1972) and defining gifted children as those “*who display outstanding performance in one or more of the following areas: General mental abilities, a specific talent in a certain academic field, creative and productive thinking, leadership skills, talent in visual performance arts, motor skills*”.

Following this definition made in the US, Renzulli (1986) analyzed people that showed extraordinary success throughout their lives, and claimed that giftedness was not merely related with intelligence but with motivation which includes ability, creativity and task commitment in one or several areas.

Gagne (1991) claimed that giftedness points to human tendencies such as mental and creative talents. He added that talent can be displayed in a field such as math, literature or music and that a full definition of the term is rather difficult to make (Gagne, 1995).

Morelock (1992) approached the concept from a developmental point of view and defined it as “asynchronous development in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively and quantitatively different from the norm”. Dabrowski (1996) stated that there were differences in the intensity of reactions to outside or inside stimuli depending on the developmental potential of individuals. He claimed there were five overexcitabilities called psychomotor, emotional, imaginal, intellectual and sensual intensities.

Freeman (2000) and Winstanley (2004) argued that giftedness is viewed like an inherent intuition, and that the term “skilled” and its variations better de-

fine giftedness. Munro (2001), on the other hand, tried to clarify the term by making a distinction between *intelligent students*, who display outstanding skill in fields of instruction and *gifted students*, who display outstanding skill in certain fields even without direct instruction. The terms “intelligent” and “gifted” seem to be mostly used in public institution strategies and the research literature (CCEA, 2006; Ziegler, Stoeger, & Vialle, 2012). Ziegler et al. (2012) state that the definition of giftedness is still problematic and these problems can only be solved by making an eclectic definition. In their definition, they emphasized the developmental nature of giftedness, ways of learning, and the need to maximize development (Burge, 1993; Fetzer, Shatz, & Schlesinger, 1991; Sager, 2000; Subotnik, Olszewski-Kubilius, & Worrell, 2011; Ziegler & Vialle, in press).

Today, Jung (2012) focuses on the relationship between success and talent by drawing on Gagne’s (2004; 2009) studies, and claims that those who cannot continually and individually succeed in a certain field in adult life lose their gifted label.

Studies to date have used the terms “gift” and “talent” as interchangeable but experts attempt to distinguish the two (Heller, Mönks, Sternberg, & Subotnik, 2000; Heller & Schofield, 2008; Sternberg & Davidson, 2005) and to identify cases that do not fall under the heading of giftedness (Freeman, Rafan, & Warwick, 2010; Peterson & Mann, 2009).

In Turkey, the 1<sup>st</sup> Special Education Council was held in 1991 by the Ministry of Education, which defined gifted children as those who have been “*shown to display outstanding general and/or specific performance as compared to their peers by field experts*”. This definition was revised in the 2006 Special Education Services Regulation as “individuals that display a higher performance than their peers in intelligence, creativity, arts, sports, leadership capacity or certain academic fields” (MEB, 2006).

Attempting to draw a conceptual framework of giftedness, Davaslıgil (2009) studied the terms common in the field globally and in Turkey, and concluded that the following three were prevalent: gifted children, intelligent children, and talented children.

## Identification of Giftedness

In parallel with the changes in other areas, preschool education has also gradually gained more significance. Identification and education of young

gifted children confronts us as one of the most important problems in this area (Parkinson, 1990; Pfeiffer, 2002; Pfeiffer & Jarosewich, 2003; Pfeiffer & Petscher, 2008; Sankar-DeLeeuw, 2002, 2004; Silverman, 1997-2004). Recent studies on the human brain have shown that experiences given to individuals early on in life contribute to the growth of the brain and its development in certain fields (Marshall, Fox, & BEIP, 2004; Parker, Nelson, & BEIP, 2005) but that the absence of such experiences affect development adversely (Lynette, Cryer, Bailey, & Selz, 1999).

Gifted children were found to display better performance when involved in learning activities that nurture their gifts (Borland & Wright, 2004; Johnsen & Ryser, 1994). Studies have shown that these children have decreased interest in academic work and tend to hide their gifts to look similar to normally developing children in the school environment (Gubbins et al., 2002; Karnes & Johnson, 1991; Siegle & McCoach, 2005).

Considering the signs of early identification, the most critical problem is to determine what method is appropriate to use with preschoolers. A comprehensive study analyzing the identification process concludes that 41% of the 64 international authorities on giftedness acknowledged that the identification of gifted children is a problematic area (Heller & Perleth, 2007; Pfeiffer, 2003; Pfeiffer & Petscher, 2008; Schofield & Hotulainen, 2004).

Many researchers claim that the identification system should include more than a unidimensional approach (Burns, 1990; Johnsen, 2004; Wortham, 2005). Data should be obtained from student development lists, anecdotal records and interviews with parents (Lois & Lewis, 1992; Roedell, Jackson, & Robinson, 1980; Silverman, 1998; Wolfe, 1989); observations, work samples and interest scales obtained from teachers (Cohen, 1989; Wolfe); and measurements such as test scores, performance measurements or the outcome of certain tasks. Previous studies on the evaluation of early childhood special education and assessment of gifted children also support the use of multiple measurement (Karnes, Shaunessy, & Bisland, 2004; NAGC-CEC, 2006; Sandall, Hemmeter, Smith, & McLean, 2005). For multifaceted decisions, formal and informal assessments need to be used in conjunction in diagnosis (McWilliam, 2005; Pletan, 1995).

Studies conducted subsequent to Terman's have

also predominantly taken into consideration IQ and standardized test scores in the identification procedures for admission into giftedness programs (Burns & O'Leary, 2004; Castellano, 2002; Kogan, 2001). With respect to the identification of gifted students, it has been established that there is a correlation between success and IQ scores (Ford & Grantham, 2003), but that relying solely on IQ scores in identification poses problems as IQ scores are more reliable after 6 years of age (McCall, Appelbaum, & Hogarty, 1973; Wilson, 1983).

In recent studies, an identification system based on scales involving both formal and informal evaluation is used. Among these formal and informal identification strategies are teacher/parent nomination, intelligence/aptitude tests, creativity tests, achievement tests, nonstandardized tests and scales (about self image, portfolio assessment, learning styles and attitudes) (Clark, 2000; Davasligil, 2009; Friend, 2008; McWilliam, 2005; Pletan, 1995).

Studies conducted in Turkey on gifted preschoolers have shown that children's developmental traits, curriculum suggestions and implementations generally rely on various EU Projects and private school efforts, though they may not be sustainable (Baykoç-Dönmez & Kurt, 2004; Baykoç-Dönmez & Özekin, 2008; Baykoç-Dönmez & Bozkurt, 2008; Metin, Özbay, & Dağlıoğlu, 2008; Özbay et al., 2009; Okul Öncesi Eğitimin Güçlendirilmesi Hibe Programı, 2009). Publications focusing on diagnosis have been rather limited due to the scarcity of measurement tools to be used with gifted preschoolers (Dağlıoğlu & Metin, 2003; Yakmacı Güzel, 2004). It is also a fact that adequate special education measures are not taken in the country to meet the educational needs of gifted preschoolers (MEB, 2010).

In this study, an identification system for kindergarten children was devised for early diagnosis of gifted children, and a comparison of teacher/parent opinions and children's performances was made by using this system. With this purpose in mind, answers to the following questions were sought in the study:

1. Within the identification system, how effective are teacher and family opinions in the selection of gifted children?
2. In line with the scores obtained on the tests implemented during the identification process, how consistent are teacher and family opinions with children's performance?

## Method

### Research Model

As this study examines the consistence between teacher and family opinions and children's performance, the variation among more than two variables is investigated. Therefore, the study follows the relational survey model.

### Study Group

Of the 600 five and six-year-old kindergarteners attending the 26 public schools in central Düzce, those thought to display a potential for giftedness were nominated by their teachers and/or families by using Parent and Teacher Observation Forms. The scores of these children were then assessed. In order to be included in the study group, children had to be nominated with the POF and/or TOF and obtain 59 or more points from these forms. Therefore, the study group was selected by using criterion sampling (Büyüköztürk, Kılıç Çakmak, Akgün, & Demirel, 2012). In the second stage of the identification process which involved the Primary Mental Abilities Test 5-7 (PMA 5-7) and Goodenough-Harris Draw-a-Person test, 113 of these 600 children were reached.

### Scales

In the study, a two-stage identification system was used to determine those who were gifted from among the preschool children. The first stage was the administration of Parent Observation (POF) and Teacher Observation Forms (TOF) for the identification of children nominated by teachers and/or parents. These forms were developed by Leroux and McMillan (1993) and were adapted by translation into Turkish by Metin (2004). The Observation Form consists of the general features and characteristic behaviors of gifted children. As the forms were completed by both families and teachers, they reveal how consistent the opinions of the two are regarding the children. The forms include a section on learning with 11 items involving mental activities both for families and teachers to evaluate, another section on creativity with 9 items, and another on leadership with 7 items. In the second stage of the identification process, the nominated children were asked to complete the Primary Mental Abilities Test 5-7 (PMA 5-7) and Goodenough-Harris Draw-a-Person test. The PMA 5-7 Test, which constituted the third stage, was developed by Thurstone and Thurstone (1981). The 5-7 ver-

sion of this test is widely used by the Counseling and Research Centers in Turkey for purposes of prequalification. PMA 5-7 consists of four subsections: language, discrimination ability, concept of numbers and space (MEB, 1994). Item analysis found the test items to be discriminative and reliable (except for three items). On the whole, the test is moderately difficult (p:58). The final stage is the Goodenough-Harris Draw-a-Person Test which is administered to measure individuals' mental development. The Draw-a-Person Test is a general aptitude test and is culture-free (Harris, 1963). It was found to have a strong correlation with the Stanford-Binet Intelligence Test (Özgül, 1994). Considering these, Draw-a-Person Test was included in the identification system to support the findings of PMA 5-6 Group Intelligence Test.

### Procedures

Following the interviews with the 26 elementary schools located in the province of Düzce and the meetings to inform teachers and parents, 300 observation forms for the teachers and 600 observation forms for the parents were provided. A 15-day period was allotted for the evaluation and submission of the forms. At the end of this period, teachers nominated 86 children and parents nominated 500 children.

As a result of the evaluation of the TOFs and POFs, those who scored 59 and above (150 children in total) out of the highest score of 104 were included in the study. These children took the PMA 5-7 and Goodenough Draw-a-Person Tests. Following the identification procedures, 113 children were reached. Those who had an IQ of 130 and above were identified as gifted.

In statistical computations, t test was used to calculate the difference between the scores of independent groups and correlation analysis was used to analyze the intelligence tests through which children's performance was examined. The item analysis of the scales completed by families and teachers was done by using score correlation statistics. The level of significance was set at 0.05.

### Results

Although the findings of the study were not statistically meaningful, the rate of the children who were identified as gifted at the end of the identification procedures that were nominated only by the parents was higher than those who were nominated by parents and teachers ( $\chi^2=0.94, p>.05$ ).

At the end of the study, 50 children who had an IQ of 130 and above out of the 113 were identified as gifted. According to this result, 44.3% of the children who were nominated by teachers and/or parents in tandem were found to be gifted. In other words, teachers and/or families were 44.3% successful at identifying gifted children.

No significant difference was observed between the scores that the gifted children obtained from the mental and creativity sections of the TOF and POF (mental  $u=85$ ,  $p>.05$ ; creativity  $u=103$ ,  $p>.05$ ), while a significant difference was found between the scores obtained from the leadership section and total scores (Leadership  $u=56$ ,  $p<.05$ ; total  $u=74$ ,  $p<.01$ ).

The differences between scores from the TOF, the mental and creativity subdimensions of the PMA 5-7 and total scores from the tests were examined. According to the findings, significant differences exist between each dimension in favor of children's performance. The greatest difference existed in general mental performance (Total  $u=22$ ,  $p<.01$ ), followed by creativity and mental fields (creativity  $u=44$ ,  $p<.01$ ; mental  $u=56$ ,  $p<.01$ ).

Meaningful differences were also found between the scores obtained by children identified as gifted from the POF and the mental, creativity and general mental performance fields of the PMA 5-7 (mental  $u=64$ ,  $p<.05$ ; creativity  $u=40$ ,  $p<.01$ ; total  $u=30$ ,  $p<.01$ ). These differences were in favor of children's performance and the greatest difference existed in general mental performance, followed by creativity and mental fields.

Significant differences in favor of children's performance were also found between the family observations of children nominated only by their families and identified as gifted and their PMA 5-7 scores in the mental, creativity and general mental scores (POF-PMA mental score  $t=-4.932$ ,  $p<.05$ ; POF-PMA creativity score  $t=-4.867$ ,  $p<.05$ ; POF-PMA total score  $t=-9.928$ ,  $p<.05$ ).

No relationship was observed between the PMA 5-7 performances and Goodenough-Harris test performance of gifted children (PMA-Goodenough (POF+TOF)  $r=-0.20$ ,  $p>.05$ ; PMA-Goodenough (POF)  $r=0.24$ ,  $p>.05$ ).

### Discussion

More children among those who were nominated only by parents were identified as gifted than those nominated by parents and teachers in tandem, al-

though this was not statistically meaningful. It was observed in studies conducted to identify especially young gifted children that parents were considerably successful in identifying children's potentials, interests, and hobbies (EDWA, 1997; Farmer, 1997; Jacobs, 1971; Lois & Lewis 1992).

In this study, 44.3% of the children nominated by teachers and/or parents in tandem were identified as gifted at the end of identification procedures. The studies carried out by Torrance and Caropresso (1998) and Powell and Siegle (2000) revealed that the use of Teacher Observation Forms to identify gifted children did not have a high level of effectiveness as teachers had certain prejudices, but that these forms could still be used since they would be of help in obtaining detailed information about the children. Deans and Denton (1995) confirmed that there were not many survey methods that could be used with children younger than six years of age and that very few appropriate methods with a sound empirical basis exist. The studies conducted on the evaluation of children's performances have shown that teachers' concerns or prejudices on issues like gender, the latent nature of talent, or the fear to misidentify might come into play (Powell & Siegle, 2000; Siegle, 2001; Weber, 1999). Other studies have found that it is more difficult to identify giftedness in preschool children than in older children (Coleman, 1985) and that progress is made in the identification of gifted children when parents are informed about the issue (Gagne, 1995; Jeong, 2010).

While studies conducted on the identification of gifted children by teachers indicate that teachers can make healthy selections 40-73% of the time (Dağlıoğlu, 1995; Dağlıoğlu & Metin, 2003; Deans & Denton, 1995), it has been found that parents are better observers of their children's talents and can make accurate decisions 50-90% of the time (Cihan, Harris, & Rockford, 1974; Farmer, 1997; Jacobs, 1971; Kord, 2000; Lois & Lewis, 1992; Smuthy, 2000). When studies that compare the effectiveness of preschool children's parents and teachers based on responses to questionnaire/observation forms are analyzed, teachers' effectiveness was found to be lower than that of parents' (Louis & Lewis, 1992; McGuffog, Feiring, & Lewis, 1987; Parkinson, 1990; Roedell et al., 1980; Silverman, Chitwood, & Waters, 1986). These results present similarities with the results of this study.

When the findings are analyzed from a quantitative standpoint, parents are more successful than teachers in identifying gifted children; however, when

the tests that were administered and the scores that were obtained are taken into consideration, teachers are found to have made more accurate evaluations of the children's performances. Moreover, while the parents made accurate evaluations about the children's creative performance, teachers and parents made accurate evaluations about their mental and creative abilities. However, it can be concluded that teachers and parents scored lower than children's actual performances required in areas of leadership and general performance, and parents were more inclined than teachers to underestimate children's performances.

Many researchers claimed that parents' comments were more reliable than teachers' in determining those that are gifted, as parents were better observers of young children's cognitive and social abilities (Jacobs, 1971; Lois & Lewis, 1992; Farmer, 1997; Kord, 2000; Smuthy, 2000). On the other hand, some research reveals that parents have a tendency to underestimate their children's abilities (Ehrlich, 1980) and that parents often make accurate observations despite the myths about parents' overrating their children's intellect (Farmer). These results are in parallel with the findings of this study. In addition, many studies suggest that when families and teachers are informed/trained about gifted children, knowledge levels rise meaningfully (Gökdere & Ayvaci, 2004; Hemphill, 2009; Johnson, Vickers, & Price, 1995; Konaş, 2009; Robinson, 1985).

The Goodenough-Harris Draw-a-Person Test was included in this study for the purpose of assisting the results of the PMA 5-7 Test. The lack of a relationship between the scores obtained from these two tests may be attributed to small group size and the fact that the Goodenough-Harris Test is based on motor skills and the ability to draw pictures. Hotulainen and Schofield (2003) studied 211 preschoolers in Finland and implemented the German Breuer-Weuffen Difference Test along with the Raven Advancing Matrices, and the Goodenough-Harris Draw-a-Person Test in order to confirm its results. They concluded that statistically meaningful relationships existed between the two test results of children identified as gifted. Also, recent studies emphasize that as children's performance is assessed, not only general talents but also specific interests of early social bloomers and those who may display outstanding performance in important disciplines should also be considered (McBee, McCoach, Peters, & Matthews, 2012; Subotnik et

al., 2011). This has been partially attributed to statistical problems and partially to the difficulty of predicting children's future potential owing to the dynamics of development (Worrell, Olszewski-Kubilius, & Subotnik, 2012).

The results of our study may be attributed to factors such as delayed preschool education in Turkey; limited or no opportunities provided by parents to children for activities like holding pens and drawing, tying shoelaces, using utensils, getting dressed and undressed, and to the fact that the duration of the PMA 5-7 test is above the attention span of the children in this age group.

For gifted children to grow up to be adults that play instrumental roles, it is necessary to identify them early on and make accurate diagnosis. The development of a diverse range of measurement tools is necessary. It is an undeniable fact that parents and teachers are indispensable in the early identification of gifted children. However, both parties need professional help on gifted children's characteristics, behaviors and communication techniques. Brochures, books, television programs, events to introduce key people and institutions, seminars, and congregation of parents with gifted children may all be important steps. Offering preschool teachers practical seminars to help them actively use child assessment tools (such as observation records, portfolios, anecdotal records, development control lists) will help the identification of gifted children. This study may be replicated on a more comprehensive level at public and private kindergartens affiliated with the Ministry of National Education and Social Services and Child Protection Agency, nursery classes, public and private preschools, and day care centers. In addition, similar studies harnessing a comprehensive identification model involving mental and other abilities could be conducted in preschools located in regions with different socio-economic and cultural characteristics. Furthermore, developing various measurement tools to assess gifted preschool children's knowledge, skills, behavior and attitudes in different ability areas would make a major contribution to this field of study.

#### Referances/Kaynakça

- Akarsu, F. (2001). *Üstün yetenekli çocuklar*. Ankara: EDUSER Yayınları, Poyraz Matbaası.
- Arı, M. (2003). Türkiye'de erken çocukluk eğitimi ve kalitenin önemi. M. Sevinç (Ed.), *Erken çocuklukta gelişim ve eğitimde yeni yaklaşımlar* (s. 31-35) içinde. İstanbul: Morpa.



- Baykoç-Dönmez, N. ve Bozkurt, Ö. S. (2008, Mart). Okul öncesi dönemde öğretmenleri tarafından yaşlarına göre üstün ve özel yetenekli olarak aday gösterilen çocukların gelişim özelliklerinin incelenmesi. *Üstün Yetenekli Çocuklar II. Ulusal Kongresi Özet Kitabı* (s. 58) içinde, Eskişehir.
- Baykoç-Dönmez, N. ve Kurt, Z. Ş. (2004). Bebeklik ve okulöncesi dönemde üstün yetenekli çocukların ve ailelerinin yönlendirilmesi. *Üstün Yetenekli Çocuklar Bildiriler Kitabı* (s. 393-400) içinde. İstanbul: Çocuk Vakfı Yayınları.
- Baykoç-Dönmez, N. ve Özekin, M. (2008, Mart). Avrupa Birliği Leonardo da Vinci Programı kapsamında 2005 ve 2007 yılları kapsamında İngiltere ve İskoçya'da üstün ve özel yetenekli okul öncesi ve ilköğretim dönemindeki çocukların tanı ve değerlendirme yöntemleri, eğitim programları ve aile danışmanlığı çalışmalarının Türkiye'de uygulanabilirliği projesi. *Üstün Yetenekli Çocuklar II. Ulusal Kongresi Özet Kitabı* (s. 9) içinde, Eskişehir.
- Borland, J. H., & Wright, L. (1994). Identifying young, potentially gifted, economically disadvantaged students. *Gifted Child Quarterly*, 38 (4), 164-171.
- Burge, T. (1993). Concepts, definitions, and meaning. *Metaphilosophy*, 24, 309-325.
- Burns, D. E. (1990). *Pathways to investigative skills*. Mansfield Center, CT: Creative Learning.
- Burns, T. G., & O'Leary, S. D. (2004). Wechsler Intelligence Scale for Children-IV: Test review. *Applied Neuropsychology*, 11 (4), 233-236.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E. ve Demirel, F. (2012). *Bilimsel araştırma yöntemleri* (11. bs.). Ankara: PegemA Yayıncılık.
- Castellano, J. A. (2002). Renavigating the waters: The identification and assessment of culturally and linguistically diverse students for gifted and talented education. In J. A. Castellano, & E. I. Diaz (Eds.), *Reaching new horizons: Gifted and talented education for culturally and linguistically diverse students* (pp. 94-116). Boston, MA: Allyn and Bacon.
- CCEA. (2006). *A report for the Council of Curriculum, Examinations and Assessment*. Retrieved September 19, 2012 from [http://www.nicurriculum.org.uk/docs/inclusion\\_and\\_sen/gifted/gifted\\_children\\_060306.pdf](http://www.nicurriculum.org.uk/docs/inclusion_and_sen/gifted/gifted_children_060306.pdf)
- Ciha, T. E., Harris, R., & Rockford, C. H. (1974). Parents as identifiers of giftedness: Ignored but accurate. *The Gifted Child Quarterly*, 18, 191-199.
- Clark, B. (2000). Building cross culture knowledge base identification survey results. World Council of Gifted and Talented Children. *World Gifted*, 18 (3), 14-15.
- Cohen, L. N. (1989). Understanding the interests and themes of the very young gifted child. *Gifted Child Today*, 12 (4), 6-9.
- Coleman, L. (1985). *Schooling the gifted*. Mass: Addison-Wesley Reading.
- Dabrowski, K. (1996). *Multilevelness of emotional and instinctive functions*. Lublin: Katolickiego. Uniwerstyetu Lubelskiego.
- Dağlıoğlu H. E. (1995). *İlkokul 2.-5. sınıflara devam eden çocuklar arasından üstün yetenekli olanların belirlenmesi*. Yayımlanmamış yüksek lisans tezi, Hacettepe Üniversitesi, Sağlık Bilimleri Enstitüsü, Ankara.
- Dağlıoğlu H. E. ve Metin N. (2003). *Anaokuluna devam eden beş-altı yaş grubu çocuklar arasından üstün yetenekli olanların belirlenmesi*. Ankara: Hacettepe Üniversitesi Ev Ekonomisi Yüksek Okulu Yayınları No: 10, Araştırma Serisi: 10 (ISBN: 975-491-142-8).
- Dağlıoğlu, H. E. (2010). Erken Çocukluk döneminde üstün yetenekli çocuklar. İ. H. Diken (Ed.), *Erken çocukluk eğitimi* (s. 322-360) içinde. Ankara: PegemA Yayıncılık.
- Davaslıgil, Ü. (2009). Üstün zekalı ve yetenekli çocukların eğitimi. G. Akçamete (Ed.), *Özel eğitim okullarında özel gereksinimi olan öğrenciler ve özel eğitim* (s. 545-591) içinde. Ankara: Kök Yayıncılık.
- Deans, M., & Denton, C. (1995). The gifted students in oxfordshire schools. N. Jones & T. Suthgete (Eds.), *Organization and executive function in the centers of integration* (pp. 173-192). Madrid: La Muralla.
- EDWA. (1997). *Gifted and talented children policy, identification, Identification Policy*. Retrieved May 22, 2007 from [www.edwa.org](http://www.edwa.org).
- Ehrlich, V. Z. (1980). Identifying giftedness in the early years: From 3 through 7. In Ventura Count Superintendent of Schools (Ed.), *Educating the preschool/primary gifted and talented* (pp. 3-22). Los Angeles CA.
- Enç, M., Çağlar, D. ve Özsoy, Y. (1975). *Özel eğitime giriş*. Ankara: Ankara Üniversitesi Eğitim Fakültesi Yayınları No:49 Kalite Matbaası.
- Farmer, D. (1997). *Just what is gifted child?* Retrieved May 16, 2006 from <http://austega.com/gifted/whatis.htm>.
- Fetzer, J. H., Shatz, D., & Schlesinger, G. N. (Eds.). (1991). *Definitions and definability: Philosophical perspectives*. Dordrecht, Netherlands: Kluwer.
- Ford, D. Y., & Grantham, T. C. (2003). Providing access for gifted culturally diverse students: From deficit thinking to dynamic thinking. *Theory into Practice*, 42 (3),217-225.
- Freeman, J. (2000). Families: The essential context for gifts and talents. In K. A. Heller, F. J. Mönks, R. J. Sternberg, & R. F. Subotnik (Eds.), *International handbook of giftedness and talent* (2nd ed., pp. 573-585). Oxford: Pergamon Press.
- Freeman, J., Raffan, J., & Warwick, I. (2010). *Worldwide provision to develop gifts and talents: An international survey*. Berkshire, England: CfBT Education Trust. Retrieved September 19, 2012 from <http://www.joanfreeman.com/freepublications.php>
- Friend, M. (2008). Students who are gifted and talented. *Special education. Contemporary perspectives for school professionals* (2nd ed., pp. 478-509). Boston: Pearson Educational Inc.
- Gagne, F. (1991). Toward a differential model of giftedness and talent. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 85-92). Boston, MA: Allyn & Bacon.
- Gagne, F. (1995). From giftedness to talent a developmental model and its impact on the language of the field. *Roeper Review*, 18,103-111.
- Gagné, F. (2004). Transforming gifts into talents: The DMGT as a developmental theory. *High Ability Studies*, 15, 119-147 (doi:10.1080/1359813042000314682).

- Gagné, F. (2009). Building gifts into talents: Detailed overview of the DMGT 2.0. In B. MacFarlane & T. Stambaugh (Eds.), *Leading change in gifted education: The festschrift of Dr. Joyce VanTassel-Baska* (pp. 61-80). Waco, TX: Prufrock.
- Gökdere, M. ve Ayvaci, H. Ş. (2004). Sınıf öğretmenlerinin üstün yetenekli çocuklar ve özellikleri ile ilgili bilgi seviyelerinin belirlenmesi. *Öndokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 18, 17-26.
- Gubbins, E. J., Westberg, K. L., Reis, S. M., Dinnocenti, S. T., Tieso, C. L., Muller, L. M. et al. (2002). *Implementing a professional development model using gifted education strategies with all students* (RM02172). Storrs, CT: University of Connecticut, The National Research Center on the Gifted and Talented.
- Harris, D. B. (1963). *Children's drawings as measures of intellectual maturity: Revision and extension of the Goodenough Draw-A-Man Test*. New York: Harcourt, Brace and World, Inc.
- Heller, K. A., & Perleth, C. (2007). *Münchener Hochbegabungstestbatterie für die Primarstufe (MHBT-P)* (Munich High Ability Testbattery Primary Level). Göttingen: Hogerfe.
- Heller, K. A., & Schofield, N. J. (2008). Identification and nurturing the gifted from an International perspective. In S. Pfeiffer (Ed.), *Handbook of giftedness in children* (pp. 93-114). Springer Link Springer Science+Business Media, LLC.
- Heller, K. A., Mönks, F. J., Sternberg, R. J., & Subotnik, R. F. (Eds.). (2000). *International handbook of giftedness and talent*. Oxford: Pergamon Press.
- Hemphill, A. N. (2009). *How teacher participation in the identification process impacts the underrepresentation of minority students in gifted programs*. Unpublished doctoral dissertation, Southern California University.
- Hotulainen R. H. E., & Schofield N. (2003). Identified preschool potential giftedness and relation to academic achievement and self-concept at the end of Finnish comprehensive school. *High Ability Studies*, 14, (1)55-70.
- Jacobs, J. C. (1971). Effectiveness of teacher and parent identification of gifted children as function of school level. *Psychology in the Schools*, 8, 140-142.
- Jeong, H. W. G. (2010). *Teachers' perceptions regarding gifted and talented early childhood students (three to eight years of age)*. Faculty of Saint Louis University in Partial Fulfillment of Requirements of Degree of Doctor of Philosophy.
- Johnsen, S. K. (2004). Making decisions about placement. In S. K. Johnsen (Ed.), *Identifying gifted students: A practical guide* (pp. 107-131). Waco, TX: Prufrock Press.
- Johnsen, S. K., & Ryser, C. (1994). Identification of young gifted children from lower income families. *Gifted and Talented International*, 9 (2), 62-68.
- Johnson, A. B., Vickers, L., & Price, R. (1995). Teaching gifted children: A summer institute for regular classroom teacher. *Education*, 105 (2), 193-200.
- Jung, J. Y. (2012). Giftedness as a developmental construct which leads to eminence in adults: Ideas and implications from an occupational/career decision-making perspective. *Gifted Child Quarterly*, 56 (4), 189-193.
- Karnes, F. A., Shaunessy, E., & Bisland, A. (2004). Gifted students with disabilities: Are we finding them? *Gifted Child Today*, 27 (4), 16-21.
- Karnes, M. B., & Johnson, L. J. (1991). The preschool/primary gifted child. *Journal for the Education of the Gifted*, 14 (3), 267-283.
- Kogan, E. (2001). *Gifted bilingual students: A paradox?* NY: Peter Lang.
- Kontaş, H. (2009). *BİLSEM öğretmenlerinin program geliştirme ihtiyaçlarına ilişkin geliştirilen programın etkililiği*. Yayınlanmamış doktora tezi, Hacettepe Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara.
- Kord, P. (2000). *Gifted identification: Parents left out! Parenting a gifted child*, Suite 101. Retrieved November 20, 2000 from [http://www.suite101.com/article.cfm/simple\\_gifted/52981](http://www.suite101.com/article.cfm/simple_gifted/52981).
- Leroux, J., & McMillan, E. (1993). *Smart teaching: nurturing talent in the classroom and beyond*. Pembroke Publisher Limited. Ontario: Canadian Cataloguing in Publishing Data.
- Lois, B., & Lewis, M. (1992). Parental beliefs about giftedness in young children and their relationship to actual ability level. *Gifted Child Quarterly*, 36, 27-31.
- Lynette, S., Cryer, D., Bailey, D. B., & Selz, L. D. (1999). Assessing program quality. National Center for Early Development & Learning [NCEDL]. *NCEDL Spotlights*, 7.
- Marland, S. (1972). *The education of the gifted and talented* (vol 1). Washington D.C.: Government Printing Office. U.S.: Commissioner of education.
- Marshall, P. J., Fox, N. A., & the Bucharest Early Intervention Project [BEIP] core group. (2004). A comparison of the electroencephalogram between institutionalized and community children in Omani. *Journal of Cognitive Neuroscience*, 16 (8), 1327-1338.
- McBee, M. T., McCoach, D. B., Peters, S. J., & Matthews, M. S. (2012). The case for a schism: A commentary on Subotnik, Olszewski-Kubilius and Worrel (2011). *Gifted Child Quarterly*, 56 (4), 210-214.
- McCall, R. B., Applebaum, M. I., & Hogarty, P. S. (1973). Developmental changes in mental performance. *Monographs of the Society for Research in Child Development*, 38 (3), 1-84.
- McGuffog, C., Feiring, C., & Lewis, M. (1987). The diverse profile of the extremely gifted child. *Roeper Review*, 10 (2), 82-88.
- McWilliam, R. A. (2005). Assessing the resource needs of families in the context of early intervention. In M. J. Guralnick (Ed.), *A developmental systems approach to early intervention: National and international perspectives* (pp. 215-234). Baltimore, MD: Paul H. Brookes.
- MEB. (1994). *Temel Kabiliyetler Testi yaş 5-7. Türkiye standardizasyonu ve norm çalışması*. MEB Özel Eğitim ve Rehberlik Hizmetleri Genel Müdürlüğü. Ankara: Yazar.
- MEB. (2006). *Özel Eğitim Hizmetleri Yönetmeliği*. Ankara: Milli Eğitim Basımevi.
- MEB. (2010). *Üstün zekalıların/yeteneklilerin eğitimi çalıştay hazırlık dokümanı*. Ankara: MEB Özel Eğitim Rehberlik ve Danışma Hizmetleri Genel Müdürlüğü Yayını.
- Merrill, C. E., & Orlansky, M. D. (1984). *Exceptional children* (2nd ed.). Merrill and Howell Company Ohio.
- Metin, N. (2004). *İlköğretim Çağındaki Üstün Yetenekli Çocukların Belirlenmesi Projesi* (Yayınlanmamış araştırma sonuçları). Ankara: Özel Erken Başarı İlköğretim Okulu.



- Metin, N. (2000). Attitudes of educators toward integration. *Burdur Eğitim Fakültesi Dergisi*, 1, 161-232.
- Metin, N., Özbay, Y., & Dağlıoğlu, E. (2008, June). A preliminary report on the project of identification and education of gifted and talented children in preschool. In *2nd International Conference on Special Education Özet kitabı* (p. 114), Marmaris, Turkey.
- Morelock, M. (1992). Giftedness: The view from within. *Understanding Our Gifted*, 4 (3)11-15.
- Munro, J. (2001). Strategic thinking: A pathway to innovation for school leaders. *Incorporated Association of Registered Teachers of Victoria*, 1, 1-2.
- National Association for Gifted Children [NAGC] & Council for Exceptional Children [CEC]. (2006). *NAGC-CEC Teacher knowledge & skill standards for gifted and talented education*. Retrieved February 15, 2008 from [www.nagc.org/...standards/final%20standards%20\(2006\).pdf](http://www.nagc.org/...standards/final%20standards%20(2006).pdf).
- Oktay, A. (2000). *Yaşamın sihirli yılları: Okul öncesi dönem* (2. bs.). İstanbul: İstanbul: Epsilon Yayıncılık.
- Okul Öncesi Eğitimin Güçlendirilmesi Hibe Programı. (2009). *Avrupa Birliği ve Türkiye Cumhuriyeti Hükümeti tarafından ortaklaşa finanse edilen "Ben de Bir Öğrenciyim" adlı proje* (Referans No: CFUC/TR 0801.06-03-109). Proje Sahibi: Tokat Bilim ve Sanat Merkezi.
- Özbay, Y., Metin, N., Dağlıoğlu, H. E., Çalışandemir, F., Bencik Kanğal, S., & Alemdar, M. (2009, June). Concerns and issues of inclusion teachers in Turkey. In A. A. Siptanou & N. G. Angeloska (Eds.), *12th Inclusive Education in the Balkan Countries: Policy and Practice, Ohrid, Makedonya* (pp. 245-251). Greece: Publishing House.
- Özgüven, İ. E. (1994). *Psikolojik testler*. Ankara: Yeni Doğu Matbaası.
- Parker, S. W., Nelson, C. A., & the Bucharest Early Intervention Project [BEIP] core group (2005). The impact of deprivation on the ability to discriminate facial expressions of emotion: An event-related potential study. *Child Development*, 76 (1), 54-72.
- Parkinson, M. L. (1990). Finding and serving gifted preschoolers. *Understanding Our Gifted*, 2 (5), 1-13.
- Peterson, S. J., & Mann, R. L. (2009). Getting ahead: Current secondary and postsecondary acceleration options for high-ability students in Indiana. *Journal of Advanced Academics*, 20, 630-657.
- Pfeiffer, S. I. (2002). Identifying gifted and talented students: Recurring issues and promising solutions. *Journal of Applied School Psychology*, 19 (1), 31-50.
- Pfeiffer, S. I. (2003). Challenges and opportunities for students who are gifted: What the experts say. *Gifted Child Quarterly*, 47 (2), 161-169.
- Pfeiffer, S. I., & Jarosewich, T. (2003). *The Gifted rating scales*. San Antonio, TX: Psychological Corporation.
- Pfeiffer, S. I., & Petscher, Y. (2008). Identifying young gifted children using the gifted rating scales-preschool/ kindergarten Form. *Gifted Child Quarterly*, 52 (1), 19-29.
- Pletan, M. (1995). Parents observations about kindergartners who are advanced in mathematical reasoning. *Journal for the Education of the Gifted*, 19 (1), 30-44.
- Powell, T., & Siegle, D. (2000, Spring). Teacher bias in identifying gifted and talented students. *The National Research Centre on the Gifted and Talented Newsletter*, 13-15.
- Renzulli, J. S. (1986). *The treering conception of giftedness: A developmental model for creative productivity. conception of giftedness*. Cambridge: Press Syndicate of University of Cambridge.
- Robinson, A. (1985). Summer institute on the gifted: Meeting the needs of the regular classroom teacher. *Gifted Child Quarterly*, 29 (1), 20-23.
- Roedell, W. C., Jackson, N. E., & Robinson, H. B. (1980). *Gifted young children*. New York, NY: Teachers College, Columbia University.
- Sager, J. C. (2000). *Essays on definition*. Amsterdam, Netherlands: Benjamins.
- Sandall, S., Hemmeter, M. L., Smith, B. J., & McLean, M. E. (2005). *The division for early childhood [DEC]-Recommended practices: A comprehensive guide for practical application in early intervention/early childhood special education*. Longmont, CO: Sopris West.
- Sankar-DeLeeuw, N. (2002). Gifted preschoolers: Parent and teacher views on identification, early admission, and programming. *Roeper Review*, 24 (3), 172-177.
- Sankar-DeLeeuw, N. (2004). Case studies of kindergarten gifted children: Profiles of promise. *Roeper Review*, 26 (4), 192-207.
- Schofield, N., & Hotulainen, R. (2004). Does all cream rise? The plight of unsupported gifted children. *Psychology Science*, 46 (3), 379-386.
- Siegle, D. (2001). Overcoming bias in gifted and talented referrals. *Gifted and Talented Communicator*, 32 (3), 22-25.
- Siegle, D., & McCoach, D. B. (2005). Making a difference: Motivating gifted students who are not achieving. *Teaching Exceptional Children*, 38 (1), 22-27.
- Silverman, L. (1998). Through the lens of giftedness. *Roeper Review*, 20, 204-210.
- Silverman, L. K. (1997-2004). *Characteristics of giftedness scale: A review of the literature*. Retrieved April 25, 2005 from [www.gifteddevelopment.com/Articles/Characteristics\\_Scale.htm](http://www.gifteddevelopment.com/Articles/Characteristics_Scale.htm)
- Silverman, L. K., Chitwood, D. G., & Waters, J. L. (1986). Young gifted children: Can parents identify giftedness? *Topics in Early Childhood Special Education*, 6 (1), 23-28.
- Smuthy, J. F. (2000, May). *CEC-Teaching young gifted children in the regular classroom*. Retrieved February 24, from [www.cec.sped.org/AM/TemplateRedirect.cfm?template=/CM/...cfm...](http://www.cec.sped.org/AM/TemplateRedirect.cfm?template=/CM/...cfm...)
- Sternberg, R. J., & Davidson, J. E. (Eds.). (2005). *Conceptions of giftedness* (2nd ed.). New York: Cambridge University Press.
- Subotnik, R. F., Olszewski-Kubilius, P., & Worrell, F. C. (2011). Rethinking giftedness and gifted education: A proposed direction forward based on psychological science. *Psychological Science in the Public Interest*, 12, 3-54 (doi:10.1177/1529100611418056).
- Terman, L. M. (Ed.) (1925). *Mental and physical traits of a thousand gifted children*. In *Genetic Studies of Genius* (vol. 1). California: Stanford University Press.

- Torrance, E. P., & Caropresso, E. J. (1998). *PDE-Assessment of preschool giftedness: Intelligence and creativity*. Penn-Link. Bulletin Board Pages. Doc. No: 400062.
- Weber, P. (1999). Mental models and the identification of young gifted students: A tale of two boys. *Rooper Review*, 21, 183-188.
- Wilson, R. S. (1983). The Louisville Twin Study: Developmental synchronies in behavior. *Child Development*, 54 (2), 298-316.
- Winstanley, C. (2004). *Too clever by half: A fair deal for gifted children*. Stoke on Trent, England: Trentham Books.
- Wolfe, J. (1989). The gifted preschooler: Developmentally different, but still three or four years old. *Young Children*, 44 (3), 41-08.
- Worrell, F. C., Olszewski-Kubilius, P., & Subotnik, R. F. (2012). Important issues, some rhetoric and a few straw men: A Response to comments on "Rethinking giftedness and gifted education". *Gifted Child Quarterly*, 56 (4), 224-231.
- Worthington, S. C. (2005). *Assessment in early childhood education* (4th ed.). Upper Saddle River, NJ: Pearson.
- Yakmacı Güzel, B. (2004). Üstün yeteneklilerin belirlenmesinde yardımcı yeni bir yaklaşım: Dabrowski'nin aşırı duyarlılık alanları. 1. *Türkiye Üstün Yetenekli Çocuklar Kongresi Üstün Yetenekli Çocuklar Bildiriler Kitabı* (s. 349-365) içinde. İstanbul: Çocuk Vakfı Yayınları.
- Ziegler, A., & Vialle, W. (in press). The actiotope model of giftedness. In S. Phillipson, H. Stoeger, & A. Ziegler (Eds.), *Development of excellence in East-Asia: Explorations in the Actiotope model of giftedness*. London, England: Routledge.
- Ziegler, A., Stoeger, H., & Vialle, W. (2012). Giftedness and gifted education: The need for a paradigm change. *Gifted Child Quarterly*, 56 (4), 194-197.