

CURRICULUM DIFFERENTIATION OF GIFTED STUDENTS IN GENERAL EDUCATIONAL CLASSES: MENTORSHIP AS AN IMPLEMENTABLE STRATEGY¹

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Abstract

In this study, mentorship as a strategy of differentiating a curriculum was investigated in meeting the educational needs of the gifted students continuing their education in elementary school classes consisting of students at the level of mixed ability. In the result of the research, it was determined that the educational activities are individualized according to the interest of the students and maintained according to this; that the activities whose challenge, complexity and deep level was increased are carried out; and that more original studies are generated. According to the researcher, such factors as planning the education well, giving education the mentors before the application, the continuation of support supplied for the mentors during the time of the application, maintenance of the relationship between the mentor-mentee in a positive atmosphere played an important role in reaching the positive results of the application.

Key Words: Mentor, Mentee, Gifted, Curriculum Differentiation, General Educational Class

Özet

Bu çalışmada, karma yetenek düzeyinde ilkökul öğrencilerden oluşan genel eğitim sınıfında eğitimini sürdüren üstün zekalı öğrencilerin eğitimsel ihtiyaçlarının karşılanmasında bir program farklılaştırma stratejisi olarak mentörlük stratejisi incelenmiştir. Araştırma sonucunda, eğitimsel aktiviteler öğrencinin ilgisine göre bireyselleştirildiği ve bu şekilde sürdürüldüğünde, güçlük düzeyi artırılmış etkinliklerin uygulandığı, disiplinler arası çalışmaların gerçekleştirildiği ve daha özgün çalışmaların ortaya çıktığı belirlenmiştir. Araştırmacıya göre uygulamada olumlu sonuçlara ulaşılmasında; uygulamanın iyi planlanmış olması, mentörlere uygulama öncesi eğitim verilmesi, mentörlere sağlanan desteğin uygulama süresince devam etmesi, mentör ve danışanların gönüllülüğü, mentörlerin iş yükünün fazla olmaması, mentör – mentee ilişkisinin olumlu bir atmosfer içerisinde sürdürülmesi, okul yönetiminin başarılı olan öğretmenleri ödüllendirmesi gibi etmenler önemli rol oynamıştır.

¹This research is partial supported by Namık Kemal University, the Project number NKUBAP.00.M9.AR.12.01.

Anahtar Kelimeler: Mentör, Danışan, Üstün Zekalı, Program Farklılaştırma, Genel Eğitim Sınıfı

INTRODUCTION

When compared with their peers, gifted students have such cognitive differences seeming like a wide range as learning more quickly, easily and earlier, storing up lots of information (Feldhusen, 1998; Finley, 2008; Sak, 2010; Terman, 1925). The cognitive differences in question affect learning speed and styles directly. The general educational curriculum presented to average students is quite below their levels and remains slower than their learning speed. Consequently, gifted students can get bored with lessons easily in which there are routine tasks, and their motivation can be affected negatively (Endepohls-Ulpe & Ruf, 2005; Feldhusen, 1998; Lens & Rand, 2000). Thus, constructing a qualitative difference in their education and consulting to differentiation in their educational experience are necessary in order to make use of curriculum applied in general education classes (Tomlison, 1999; Vantassel-Baska, 1998).

Acceleration opportunities like skipping grades and early admission into higher level institutions are applied or enrichment curriculum is another favored administrative response to the needs of that students. In recent years, mentoring has been an acclaimed and renewed emphasis in the education as a solution to gifted and talented students educational needs. Typically, there are three types of mentoring programs: Educational or academic mentoring, career mentoring and personnel development mentoring. Educational or academic mentoring focuses on improving students' overall academic achievement (Grantham, 2004). Accordingly there is a lot of variation of the applications of the mentoring concept, impossible created singular mentoring definition. As for, Clasen and Clasen (2003, as cited in Sak, 2010) state that the mentor co-operatively executes all the roles such as teaching, guiding, consulting, expertise, role modeling and friendship. Wright and Borland (1992) limited the term mentor with its meaning of friend.

Mentorship in education of gifted individuals

As an educational concept, mentoring dates back to thousands years ago. Historical biographies of eminent persons frequently highlight the role of mentors in their development. Goertzel, Goertzel, and Goertzel (1978, as cited in Casey & Shore, 2000) identified the presence of an influential one-to-one relationship in the lives of 300 eminent people. In the ancient times, Nizamülmülk was mentor to Melikşah, Socrates to Plato, Akşemseddin to Conqueror Mehmet, Joseph Haydn to Mozart.

In the current context of a large-scale universal education system, mentorships can provide opportunities for the kinds of individualized relationships the school structures do not always readily facilitate (Little, Kearney, & Britner, 2010). Once gifted students begin formal school, the need soon arises for building relationships with other peers and adults and experiencing educational opportunities that extend beyond the typical formal school curriculum (Grybek, 1997). For gifted students, mentorships have often been seen as opportunities to receive the individual support that school systems often cannot provide (Little, Kearney, & Britner, 2010).

When mentoring strategy compared to other groups, the strategy provides more advantages for especially highly gifted students, gifted students who are not able display the expected success and those in disadvantageous groups (Siegle & McCoach, 2006). A lot of articles regarding mentoring programs for adolescents or adult are available (see meta-analysis by Allen, Eby, Poteet, Lentz, & Lima, 2004; Dubois, Holloway, Valentine, & Cooper, 2002;

Underhill, 2005; see review by Ehrich, Hansford, & Tennent, 2004). But, there is lack of a meta-analysis or a review of mentorship of gifted individuals. The literature contains relatively little empirical literature regarding mentoring programs for it has particularly focused on gifted students (Hebert, 1997; Hebert & Neumeister, 2000; Şahin, 2014; Wright & Borland, 1992).

Hebert and Neumeister (2000) examined how a mentoring program provided a differentiated educational experience for gifted students at elementary school students. Major findings of that study describe a thoughtfully designed program resulting in partnerships that provided the gifted students with an intellectually stimulating experience combined with strong motivational and emotional support.

Wright and Borland (1992) established mentoring opportunities for eight students, minority kindergarten students. The manner in which the mentors worked with the children can best be illustrated by play and talking time or including coaching in successful school behaviors and basic skills. The kindergartners were enthusiastic about the chance to have a mentor and the authors inferred from the data that mentee self-esteem was positively affected as a result of receiving so much attention for someone so highly regarded. Besides, it was determined to be an effective strategy improving underachievement students' academic achievement (Hebert, 1997) and quite an effective strategy for gifted and non-gifted secondary school students to enhance the creative potential (Şahin, 2014).

Curriculum differentiated in education of gifted individuals

The notion of a "One size" fits all in the education world does not meet the needs of all students. All students are educated equally based upon individual needs within one classroom using the differentiated instruction. Differentiation is a method of teaching that recognizes and draws upon differences between students while promoting a high level of excellence for all students (Tomlison, 1999).

It is difficult to determine the limits of the level and content of a curriculum which will be presented to gifted students. The reply of this question is hidden in the gifted students' learning features and nature (VanTassel-Baska, 2003). Differentiation is not has a set formula or form (Tomlison, 1999). But, there is a good deal of consensus among writers about underlying principles for developing differentiated curriculum. Although various approaches are recommended, the fact that there have been few if any "small wars" among theorists is testimony to the general acceptance of principles that can be found in the literature, such as abstract concepts, advanced level content, and a blending of content and process (Renzulli, 1988).

Applying a differentiated curriculum helps the students develop a positive attitude for the course of Mathematics (Boerger, 2005; Yabaş & Altun, 2009) and English (Sayı, 2013), it supports them in increasing their academic success (Karaduman, 2012; Kök, 2012; Luster, 2008; Sayı, 2013; Springer, Pugalee, & Algozzine, 2007; Richard & Omdal, 2007; Üşenti, 2013), reduction in the negative effects of labeling as gifted (Heal, 1989, as cited in Reis & Renzulli, 2009), increases their metacognition skills and perception of self-efficacy (Yabaş & Altun, 2009) and increases their motivation for school (Hebert, 1997; Hebert & Neumeister, 2000). Moreover, it was determined improve the writing skills (Üşenti, 2013), creative thinking skills (Karaduman, 2012; Kök, 2012; Sayı, 2013; Şahin, 2014), critical thinking skills (Sayı, 2013) and general cognitive skills (classification, analogy, memory, verbal reasoning etc.) (Üşenti, 2013).

In a study by Şahin (2012), it was concluded that the majority of the gifted students continue their education in their classes at mixed ability levels. The researchers who are accepted as the authority in the area of the education of gifted students argue that teachers should know the characteristics of gifted students very well in order to meet the educational

needs of these students and that they should have enough knowledge in the subject of differentiation of curriculum (Cramer, 1991; Davalos & Griffin, 1999; Feldhusen & Huffman, 1988; Hanninen, 1988; Gallagher, 2000; Pigge & Marso, 1987). They points out that the class teachers have limited knowledge on the gifted students (İnan, Bayındır, & Demir, 2009; Gökdere & Ayvaci, 2004; Şahin & Kargın, 2013) and lack knowledge on teaching strategies to use for gifted education in their classes (Şahin & Levent, 2014). If the program in the normal education classes is applied, on the other hand, without any differentiation in the curriculum; not only low success syndrome but also temporary or permanent mental laziness may occur among those students (Sak, 2010: 138).

In the literature, there are research findings showing that the mentoring strategy is one of the effective strategies which may be used in order to satisfy the gifted educational needs of students who attend the elementary school (Hebert, 1997; Hebert & Neumeister, 2000; Wright & Borland, 1992). A research was obtained in which the effect of mentoring strategy was analyzed in order to differentiate their curriculum in satisfying the educational needs of the gifted students who attend the classes which consist of the students at the mixed competence levels (Hebert & Neumeister, 2000).

This study aims to investigate the effectiveness of mentorship as a strategy of differentiating curriculum in meeting the needs of gifted students continuing their education in elementary school classes consisting of students at the level of mixed ability. The resulting reached in this study will contribute to collecting information needed in making up the samples of good application for differentiation of the curriculum of gifted students continuing their education at the level of mixed ability.

METHOD

Methodology

In the research, qualitative design was used in the study in order to determine an educational intervention used with the purpose of differentiating the educational experience of elementary school students who were identified to be gifted. The study was maintained according to case study. Out of case study, holistic single case design was used. This design is used to in the study of the cases which are excessive, contrary, peculiar and which do not fit the general conditions well (Yıldırım & Şimşek, 2011). It enables the pattern which a specific individual or group makes up to be understood in its natural environment. In this study, mentorship was handled as a case.

Criterion-based selection, a strategy of purposeful sampling, was used to identify participants in the present study. This strategy allowed for the selection of cases that each met a predetermined set of criteria necessary to investigate the research question (LeCompte, Preissle, & Tesch, 1993, as cited in Yıldırım & Şimşek, 2011). While the study group was determined, the selection criteria concerning the students which will be selected were constructed. The selection criteria were determined as: the student's being gifted, his continuing education in the third or fourth class at elementary school, his being successful academically, and the principle of being willingness.

While it was decided whether or not the student was gifted, intelligence test was taken into consideration. As test, the results of WISC-R intelligence test (those getting 130 or over intelligence scores) or those of Raven Standard Progressive Matrixes Plus Test (those taking part in the first %5 rank) were used. As academic success, course scores of the previous year were regarded.

Participants

Mentees are composed of totally 6 students who continue their elementary education in the third and fourth classes. Four of them (% 33,33) continue the third class while two (% 66,67) continue the fourth class (Age range= 9-12; M=10,33; 3 female and 3 male). As mentors, the students' class teachers were selected. In the selection of the mentors, the following criteria were taken into account: the workload should not be more than 6 hours a day, mentees should be the classroom teachers, and they should be willing for the study.

Four teachers took charge as the mentor. Two of the teachers (% 50,00) are female while two of them (% 50,00) are male. The mentors' occupational experience varies between 5 and 8 years. Two of the teachers (% 33,37) maintained the study with two students at a time whereas four of them (% 66,67) worked with one each mentee at a time.

In this study, the real names of the participants were removed and replaced by pseudonyms for identification reasons. Accordingly, the mentors were called as M1, M2, M3 and M4 while the mentees called as P1, P2, P3, P4, P5 and P6. The mentors and mentees were matched as follows: M1-P1, M2-P2, M3-P3/ P4 and M4-P5/ P6.

Theoretical framework

There are numerous differentiation principle within the context of various curriculum models which may be applied in order to differentiate the curriculum (Detailed: Renzulli, Gubbins, McMillen, Eckerd, & Little, 2009). Among the principles which are most commonly emphasized clearly or allusively; there are depth, complexity, challenge and creativeness. Considering the curriculum applied in the general education classes, it was aimed in this study to differentiate in the fields which the students show interest and are advanced through the dimension of mentioned principles. VanTassel-Baska and Stambaugh (2006) explain the mentioned principles as follows:

Depth: Depth is to allow for the experience and living including the student's learning state of advanced level in the subjects or areas which he is interested.

Challenge: Challenge is to use the sources of advanced levels, to construct more than one connection and reasoning in the content discussed and to maintain the study in such a way that it will be connected with more than one discipline.

Complexity: Complexity is emphasizes the high level skills of thinking.

Creativeness: Creativeness is the students' constructing a model concerning the concept examined, offering more than one alternative solution/ advice/ result or their proposing an innovative product, then presenting it. This study will be limited to VanTassel-Baska and Stambaugh principles.

School-based programs might stress more academic focused outcomes than field-based programs (Kolar & McBride, 2011). According to Grassinger, Proath and Ziegler (2010), mentorship is an effective strategy especially in enhancing school success when educational aims are defined clearly in its applications. In this study, an academic relationship between the mentor and mentee based on school was maintained. In the applications arranged according to this model, the mentor and mentee have a face to face and hierarchical relationship personally.

Procedures and Application

The application covers a period of eight months between November 2012 and June 2013. In the study, the following phases were followed respectively: Determining the mentee and mentor group, informing the mentee families and taking their approval, giving in-service education to the mentors, planning the application, performing the application and evaluation.

The teachers selected as mentors received training for twelve hours in three days before the implementation. Training topics include mentorship process and administration, preparing

activities with an increased level of difficulty, curriculum compacting, curriculum differentiating, preparation and evaluation of the projects and responding to the basic needs of students (acceptance, approval, respect, encouragement, discuss goal setting).

The first four weeks, informal conversations were carried out on general topics that are of interest to the student, and then the studies with academic emphasis were started. The study topic was determined considering a subject that is interest to the student or an achievement gained within the scope of general education curriculum. The students were explained how to differentiate the chosen topic from the points of its depth, complexity, challenge and creativeness dimensions using examples. Subsequently, the student was given the study topic as a project/ performance assignment and the activities related to the topic were expected to prepare. The completed work was assessed together with the student in consultation hours. In the sessions, planning the study, the application steps, the sources used and their types, how the study can be carried out more differently, what he learnt from the study and the results of the study were evaluated.

Before starting the application, the principles for the interaction between the mentor and the mentee to be maintained in a certain framework systematically were made up. The mentor-mentee interviews were decided to be maintained at least 1-1,5 hour a week and personally. While the application was performed, a flexible approach was embraced in selecting the subject and in the interview times. When deciding the topic to study, it was decided to study the external topics in some weeks as well as the topics in the general curriculum. Depending on the preparation status of the students and the characteristics of the topic, some studies ended in two sessions while some of them took up to six weeks.

The researcher was always in cooperation with the mentors in the process of the application. The meetings were held in the first week of each month. At the meetings, the subjects such as the course of the application, whether any problem was faced or not, and the level of participation were evaluated. Also, information and experiences of the mentors were shared with each other at the meetings held.

Data Collection

Semi-structured interviews were used to gather data for this qualitative study. Semi-structured interviews consisted of open-ended questions. Interviews were conducted with the goal of providing a clear understanding of the experiences of the mentee and mentors.

Interviews were carried out with an aim to collect necessary data and participated by four teachers, six students and six parents. In order to prevent data loss, the interviews were recorded with a sound recording device. Then, the records were offered to the approval of those being interviewed after being transcribed.

Data Analysis

In the research, content analysis method was used. While content analysis was made, the type of coding out of the types of coding was selected according to the concepts coming out of the data (Yıldırım & Şimşek, 2011). The researcher made up the codes by reading the data several times and detecting the important points he sees in the scope of the purpose of the research.

The transcribed interviews were coded and analyzed according to the coding paradigm described by Strauss and Corbin's (1990, as cited in Yıldırım & Şimşek, 2011: 227) three-stage process. The initial type of coding, open coding, all transcribed interviews were read and analyzed line by line to generate categories. The next stage, known as axial coding, identified consistent themes. This process enabled cumulative knowledge to emerge about relationships

among category. Then, these relationships were grouped and labeled. In the final stage, known as selective coding, a core category was identified with the axial categories.

In order to prevent the potential researcher bias in the course of the research, the researcher examined the level of consistency between observations by codifying twice twenty days at different times again. In the calculation, the formula of " $reliability = \frac{agreement}{agreement + disagreement} \times 100$ " was used. The fact that reliability coefficient is 0,70 or over denotes the fact that the data of the research is reliable (LeCompte & Goetz, 1982, as cited in Yıldırım & Şimşek, 2011: 263). In the calculation made, consistency between observations was calculated as 0,86. According to this result, it was concluded that the findings are reliable.

FINDINGS

In this study, a main category titled curriculum differentiation and four sub-categories titled complexity, creativity, challenge, depth have been identified. The category of curriculum differentiation can be conceptualized as the applications maintained within the scope of vertical or horizontal enrichment which is compatible with the general educational curriculum. Firstly, the frequencies of the ideas of the mentors and mentees within the scope of curriculum differentiation were calculated.

Table 1. Frequency and percentage distribution of the views of mentors and mentees

Sub-categories	Coding	Mentor	Mentee	Cumulative Total
		%	%	%
Challenge	Using multiple data collection tools	75.00	25.00	42.86
	Comparing different situations	100.00	25.00	42.86
Creativeness	Creating original products	100.00	83.33	78.57
	Preventing peer pressure	25.00	75.00	35.71
Depth	Making observations of real-life situations	100.00	75.00	57.14
Complexity	Including activities with an increased difficulty	100.00	83.33	64.29

The opinions of the mentors and mentees were asked to determine the implementation of curriculum differentiation and to meet the educational needs of gifted students. The findings are summarized in Table 1. It was understood that the activities in the sub-category of challenge were implemented at most to differentiate the curriculum. It is followed by activities of creativity, depth and complexity.

While the mentors decide about the project homework to be discussed at the sessions, one of the strategies which he applied to differentiate the topic in the general education curriculum is comparing different situations is one of the sub-category of challenge. Expression of M1 on the subject "...I wanted her to compare the products grown in Sinop and Hakkari according to the climate properties...".

Another strategy which the mentors apply in order to differentiate the topic in general education curriculum is using multiple data collection tools is the other sub-category of challenge. M1 says that "I wanted her to research the subject from the printed sources in the library, a secondary school science teacher and the sources whose origin is the internet". P3 says that "...for the interview days, I'm often make special preparations... read some things, draw, look at another thing after leaving it, then switch on the internet...", and her expressions are similar to those of M1 says using multiple data collection tools which is explained under this title.

Creativity is another sub-category placed under the main category of curriculum differentiated by mentor. Mentors state that the more original products were created, the more

the peer pressure on the mentees was prevented. In a project study, P5 made a submarine by using a balloon and a plastic bottle. Expression of M4 on the subject "...in one of his studies, he prepared an unusual mechanism by using a balloon and plastic bottle concerning how submarines operate...". P6 drew a distinctive machine in a study which he called the time machine. Expression of M4 on the subject:

"...although we did not envisage such a study, he drew a time machine. We investigated it together, he talked, and I listened to him; a pressure utensil, accelerators, dividing the substance into pieces, reuniting of the pieces where they were irradiated, he drew one by one..." (P6's teacher, M4, interview, July 6, 2013).

M3's opinion was in parallel with the opinion of the M4. M3 expressed that the activities performed enabled the mentees to generate more creative activities, "...These types of studies paved the way for the student both to use his imagination and to carry out comprehensive studies suitable for his level, cause the emerge of more different work". P3's statement confirms the statements of the M4: "the questions my teacher asked me always stay in my mind: What/ How else can you do?..."

Students having unusual opinions in comparison with the group in which they are sometimes encounter with peer pressure, and even they are derided because of their opinions. Students facing such a case usually exhibit regressive attitudes and do not share their opinions with the group. It was understood that P2 encountered with such a case in the general class environment. This student stated that his questions were made fun of in the class, and thus he did not share his opinions in the class as a result of its reflection. But he said that he could express his opinions in a more relieved way in the studies which he maintained with his teacher personally:

"When I asked something, my friends were looking at me as if I had asked a strange question. So I did not ask the questions which came to my mind. My teacher does not laugh at my questions and not make fun of. For the first time, a person listening to what I tell with patience without deriding appeared." (Dilek's student, Ahmet, interview, July 6, 2013).

The depth is the other sub-category of the study. Another principle which the mentors apply in order to differentiate the topic in the general education curriculum is the deepening the curriculum. As it may be understood from the data of interview, the observations of the real-life situations were made in this context. M4 makes a comment accordingly "...once, we conducted an experiment for her (P6) to observe. He observed the result during a month, and we drew a chart of the data she collected together". F6's statement supports the statement of the M4: "... he said that he would conduct an experiment, he sowed beans in the vases, and he began to measure with a ruler in his hand... he insisted us on buying a microscope for him..."

Complexity is another sub-category of curriculum differentiation. It was determined that one to one activities of mentors and mentees mostly based on the activities with an increased level of difficulty compare to the activities of general education. The opinion of M4 on the subject are as follows:

"... we would decide together on the subjects to study. I would recommend them and my students would say OK. When I suggest subjects, I would usually browse through the subject aims of general education curriculum. I could scale up the specified aims one or two step further according to the Bloom's Taxonomy and then edit, finalize and recommend them to my students as potential subjects to study. (P5 and P6's teacher, M4, interview, July 7, 2013).

When M4 interview data was analyzed together, it was understood that the activities held with the students were taken from the general education curriculum and the difficulty levels were increased according to the Bloom's Taxonomy.

DISCUSSION

In the finding section, I described the participants' comments about the implemented program. Then, I will discuss it. In the research, curriculum differentiation emerged one main category and those of four sub-categories.

Considering the areas in which gifted students are interested, allowing for them in the decision process while the subject that will be studied is determined and providing opportunities for the subjects determined to be carried out with independent studies influence students' motivation positively (Hebert & Neumeister, 2000; Hebert & Olenchak, 2000; Uresti, Goertz, & Bernal, 2002). Because of that condition is increase their internal motivation (Hebert & Neumeister, 2000; Hebert & Olenchank, 2000; Philips & Lindsay, 2006). Also, Hebert and Olenchak's (2000) imply the fact that studying in the areas where the student is strong and the subjects in which he is interested supports his academic development. In this study, the general educational curriculum was differentiated with the independent activities, and this enabled the students to study in the areas in which they are interested.

Theoretical can be said that mentors provide their mentees with stimulus of mentally advanced level and become a positive model with their behavior (Little, Kearney, & Britner, 2010). Also, independent project studies help mentees to gain thinking skills of the more advanced level (Hebert & Neumeister, 2000; Terry, 1999). In one of Davalos and Haensley's (1996) studies, it was determined that thinking/ problem solving skills of 19% of the students having mentors increased. It theoretically supports the expected findings of the mentioned researches – development of the thinking skill of the students having mentors - (Davalos & Haensley, 1996; Hebert & Neumeister, 2000; Terry, 1999). In the study, the development level of the mentees' thinking skills was not measured directly. However, it was expected that the mentees' using to challenge, complexity, creative and more deepened activities and their spending time with their mentees having more advanced thinking skills than themselves prompted their thinking skills to develop more quickly than their peers in the general class surrounding.

Another finding obtained in the study is the increase of the complexity and depth dimensions of the curriculum presented in general education. While increasing the difficulty level of the presented curriculum in general education, the mentors considered the taxonomy of Bloom. While increasing the depth level, the strategy of giving opportunity of observing in real environments was used. Giving students duties which are difficult to overcome in the education of gifted students enables them to advance their eagerness for taking risk and their potentials (Phillips & Lindsay, 2006). According to the researcher, it was thought that increasing the complexity and depth of the curriculum indirectly supports the presentation of more creative products which are the other findings of the study. Namely, the quality of the creativity product depends on the interaction of numerous mental and affective characteristics (Detailed in Sak, 2009; Copley, 1997; Runco, 2007). Taking risks is among the affective characteristics which triggers the emerging of the quality of creativity product (Sak, 2009; Feist, 1998; Runco, 2007).

Another finding reached in the study is that the mentees could not express themselves comfortably in the class surrounding because of confronting with peer pressure while expressing their unusual opinions. One of the biggest obstructions against creativity is the group pressure (Beghetto, 2010; Davis, 1999). In the interviews which the mentee had with his mentor, the mentor did not criticize him for his unusual opinions and listened to him with patience. Thus, the mentor supported him in order to help him express himself more comfortably. Children whose opinions are respected can express themselves more comfortably.

According to the researcher, this approach both enables the students express themselves more comfortably and gives support to a special relationship between the mentor and mentee to be established at the same time.

CONCLUSION, SUGGESTION AND LIMITATIONS

In Torrance's (1984, as cited in Casey & Shore, 2000) longitudinal research maintained on 200 creative children during 22 years, it was determined that every successful individual has a special teacher who can change his life. Mentorship strategy has begun to find more application areas in education in current years, even being used in children maintaining their education at pre-school period, as for Project of Advancement of Resilience at a Young Age (Detailed: Israelashvili & Wegman-Rozi, 2005) and Project Synergy (Detailed: Wright & Borland, 1992). That project study provides support for the belief that there is a relationship between early identification of gifted children and high performance in one or more talent areas as an adolescent (Moon & Feldhusen, 1993).

The effectiveness of mentorship as a strategy of differentiating curriculum is investigated. In the applications carried out within the scope of the study. In this research, result showed that the activities were carried out in more than one device of data collection was used (challenge), that different situations were compared (challenge), that the activities whose challenge level was increased were used (complexity), that making observations of real situations (depth), that more original product studies emerged (creativity), and that preventing peer pressure (creativity). Thus, it can be said that the general educational curriculum was differentiated for the gifted students in terms of complexity, challenge, depth and creativity.

On the other hand, there are limited educational methods or techniques in satisfying the educational needs of the gifted students who attend the classes consisting students at mixed skill levels (Detailed: Tomlinson, 1999). The findings of this research which were summarized in the previous chapter show that mentoring strategy is effective on the differentiation of the curriculum of the gifted students who study in the general education classes. The teachers will be able to use the mentioned strategy in mainstream environments. The occasion that the gifted students are educated in the same classes with their peers positively affects their peers and gives them the opportunity to cognitively take the gifted students as their model (Archambault, *et al.*, 1993; Ataman, 2000). Thus, mentoring strategy will also support the cognitive development of their peers in the same educational environment as well as the gifted students.

In a study of Ryan, Whittaker and Pinckney (2002) which covers elementary school students who are in the average intelligence range, the application of reading, writing and academic activities within the scope of mentorship strategy. But it was determined that the proportion of students' participation for lessons was low. On the other hand, this study's results were contrary to that study. It was discovered that gifted students behaved eagerly towards maintaining the activities planned within the scope of mentorship and completed the studies given. This case can be commented that the applied strategy can meet gifted students' educational needs when taken into account their nature and learning features.

Another finding which wasn't employed in the primary questions of the study but emerged while examining the findings was the one which the mentor and mentee gave fully positive feedbacks for the implementation. In their studies which Ehrich, Hansford and Tennent (2004) reviewed 14 studies, it is expressed that only positive outputs in %35.80 of the studies were reported. According to Gray (1982), mentors' willingness for the study is an important factor in the achievement of the application. The mentors participated in the study eagerly. It

was thought that planning the study well, the mentees' eagerness for participating in the study, maintaining the activities with a student-centered method, the mentors' having not heavy workload, giving in-service education to the mentors before the research and the researcher's support the mentors during the study must have contributed to reaching these results.

The consultation hours were sometimes shifted generally because of the reasons resulting from the mentees. This case is a general problem encountered in the studies covering childhood aged individuals (Hebert, 1997; Hebert & Neumeister, 2000; Israelashvili & Wegman-Rozi, 2005). Therefore, instead of rigid time planning, flexible time planning in these applications covering childhood aged individuals will affect the efficiency of the study positively.

There are a number of limitations of the study. The first of them is that the interview data of the mentees are not as enriched as those of the mentors. But, Ryan, Whittaker and Pinckney (2002) mention a similar limitation in their study covering elementary school students, and Wright and Borland (1992) implied the same limitation in their study covering kindergarten school students. The basic reason for this is that the cognitive development levels of the mentees are not as advanced as those of the individuals whom the data were collected from. Another important limitation is this study was carried out with a limited number participant. This condition limits the generalization of research findings. Therefore, it is important that the researchers interested in this topic should conduct further research with a larger sample groups to generalize the results.

Considering elementary school gifted students, the following things can be suggested in order to apply more effectively the studies arranged according to the model of mentorship application:

- ✓ Workload of mentors is just fit for studying with the students personally,
- ✓ The activities maintained are student-centered,
- ✓ The daily tasks of mentors and mentees are not so busy,
- ✓ The activity subjects are organized as in parallel with the school subjects studied in the general curriculum as possible.
- ✓ Enabling the products to share with peers in the class surrounding,
- ✓ Time planning is flexible.

Also, the success of the application is connected with the accord between the mentor and mentee. If a mentee has a positive relationship his classroom teacher, it is suggested that the first person selected as the mentor should be the classroom teacher. Appointing the classroom teacher as the mentor will enhance the applicability level of a study.

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