

Full Length Research Paper

Education of the gifted students in Turkey and a sample activity

Mehmet Ali GENÇ

Department of Art Education, Education Faculty, Necmettin Erbakan University, Konya, Turkey.

Received 11 November, 2015; Accepted 17 May, 2016

After the Enderun College which successively provided gifted education during the Ottoman period, special education for the gifted in Turkey was interrupted. The discussion of talent education started after 1993 and an education model convenient to the conditions in Turkey was developed following the steps of how it is done in other parts of the world. In order to apply this education model, institutions called “the Center of Science and Art” were opened. During the early educational stages of those institutions, the aim was to give “Discipline Based Art Education” while at the later stage, it provided art education for the production of art works. This qualitative study is a response to the insufficient publications of visual arts in the education of the gifted students in Turkey; in the form of “Action Research”. In the study, the education of gifted students in visual arts in Turkey was analyzed and an art education at the level of conformity was presented through observation.

Key words: Superior ability in art, the center of science and art, art activity, art education.

INTRODUCTION

Numerous explanations have been given to describe gifted students in the field of art. Gifted students in the field of art are those who generally become prominent through their ability to make drawings which show original ideas or innovations, independently based on their advanced abilities (Cukierkorn, 2008:24). Such gifted students usually possess different traits and as such require specialized education. This form of education was provided by Enderun college (Enç, 2004: 39) which is one of the basic foundations of Ottoman Empire for power and welfare. The objective of this college is to train gifted children for the top management or military positions to serve in the Ottoman Empire. In this school which art education is also taught, the aim is to train each

student in at least a field of art (Corlu, 2010: 21-22). Although it stems from such origin, education of the gifted in the field of art in Turkey has been neglected for a long period of time after these schools.

In 1956, the state made provisions to provide specialized education both abroad and in the stateside for students who display extraordinary abilities in the field of art (Davasligil, et al., 2004: 56), since after then, the necessity for gifted education did not come into agenda until 1993. After 1996 (Akarsu, 2004: 150), “the Center of Science and Art” (Bilsem) which provided education support to gifted students became popular. Just like in Enderun, science and art were integrated into the education of these schools.

E-mail: m.aligenc@hotmail.com. Tel: 05053997277.

Authors agree that this article remain permanently open access under the terms of the [Creative Commons Attribution License 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

In Bilsem where they use a five-step education system (Davaslıgil, et al.,2004: 62), “discipline based art education” which includes art history, art criticism, aesthetics and art applications in the first three steps is provided for mentally and artistically gifted students. In one of the the stages which is “Developing Special Talents” and “The Project”, Bilsem provides art education to gifted students on art productions. In this stage, the students are involved in the art activities either in group or individually and therefore gain the ability of study alone.

In this study, the education of gifted students in the field of art in Turkey and the educational stages of the Center of Science and Art were analyzed and Bilsem “Compliance” training was presented through an activity observed in the course of Visual Arts.

METHODS

This qualitative study was carried using the “Action Research” model. This is a research approach which aims toward understanding and sorting out a problem in an application process and is conducted by the applicant itself or by the aid of another researcher (Yıldırım and Şimşek, 2005, 295). This approach which aims to develop school-based and classroom-based educational applications is generally conducted by the teachers (Demirel, 2005, 52).

In the study, the education of the students who are regarded as gifted in the field of art was examined through literature reviews for the educational stages of the Center of Science and Art, the “Orientation”, the first stage of Bilsem education, was presented through an activity conducted in the course of visual arts.

While establishing the study group, an easily accessible status among the purposeful sampling methods was employed since there is only one Center of Science and Art in Konya and the researcher has been working as a visual arts teacher in this institution for five years. The activity was conducted on 22 students (13 boys and 9 girls) at the level of “Orientation” period (third grade of primary school) of the Center of Science and Art. The study was limited to three hours of lesson and observation by the researcher.

As for data collection tool, “the Teacher Observation Form” was used. During the process of preparing the form, the literature was first considered. The headings and the clauses were also deliberated upon. The form consisted of open-ended questions, the aim was to find answers to questions such as: whether students liked the activities or not, whether the discipline based art education complies with the orientation process, and to what extent the activity is beneficial for the students. The data of the research were obtained by the researcher through observation. Data were descriptively analyzed.

The art education of the gifted students in Turkey

The gifted (especially talented) people in the visual arts are the individuals who display extraordinary abilities in one or more fields of art (Boland, 1986: 19) and they have advanced level of communication and imagination (Cited by Alshouse, 2008:1). Although the education of those individuals is little if any most recently in Turkey, the Enderun College which served during the period of Ottoman Empire provided sublime education. The “Enderun” where the gifted education was systematically applied for the first time in the world undertook the most significant missions for the development and maintainance of the Ottoman Empire

(Enç, 2004: 38). Gifted-talented students were chosen for those schools in their early ages, they were provided the best educational opportunities and assigned to positions at every level of the state government (Özmen and Kömürlü, 2013: 42). A great importance was given to practices and handcraft in the school program when compared to perceptions related to education. The students had to learn one of the fields of art. Moreover, Enderun included significant elements of current perceptions related to education through its flexibility which is convenient to support and develop individual concerns and abilities (Enç, 2004: 39-42). The education system of the school enabled students to be trained multi-functionally as wise and perfect people rather than only scientists, artists or soldiers (Corlu, et al.,2010: 22).

Except the Law No 6660, no application of special education law was passed since after the Enderun College until 1993. Through the aforementioned law issued in 1956, educational arrangements were made to accomodate gifted students in the field of visual arts (Enç, 2005: 9). Through this arrangement, students who display extraordinary talents in the fields of music and art were given the opportunity to study either domestically or abroad through legal opportunities.

As a result of numerous studies stating that gifted students have different educational needs thus in 1993 there was establishment of schools in order to train the gifted ones in the fields of science and art came into agenda. Those schools which are called “the Centre of Science and Art” (Dönmez, 2004: 71) were increased in number through adaptations of the educational laws in Turkey.

The notion of “Bilsem” which started to gain popularity in 1996 (Akarsu, 2004: 150) was established through adapting it into current economic, social and cultural conditions and educational system of Turkey considering the most contemporary studies and theories in the world (Uzun, 2004a: 25). The opportunity which was available to the students; to be educated in the company of their peer groups is one of the most commonly preferred methods in the world. In different parts of the world, there are “Scientific Centers” for the education of students in the field of science and “Art Centers” for the educations in the field of art. Considering the existence of these two types of institutions, the two centers were merged with the thought that the science cannot be distinguished from art and art cannot be distinguished from science and through this system which is peculiar to Turkey, “the Center of Science and Art”, was established (Ataman, 2007: 22–23). Clark and Zimmerman (1998: 746) who conducted long researches on the education of gifted people have believed that the fields of science and art in the education of gifted people should be integrated into each other. The establishment of Bilsem’s has been a move in this direction.

This form of education was adjusted to the conditions in Turkey so that the students who attend the morning sessions for their formal training may come in the afternoon while those who attend the sessions in the afternoon may attend this education in the morning. The students receive basic education from the school where they attend with their peers while they receive information in the fields of science and art that they are superior in Bilsem. Thus, the students have the opportunity of special education without being isolated from their peers and class-mates (Dönmez, 2004: 72). The objective of Bilsem which starts from preschool education till the of secondary school (Davaslıgil, et al., 2004: 61) is to develop the gifted or special talented students at the stages of pre, primary and secondary school into individuals who can combine scientific thoughts and attitudes to aesthetic values in solving problems (Uzun, 2004: 26).

The art education in the centre of science and art

The education of students with superior abilities in visual arts which require services and activities that cannot be obtained in normal

schools (Hurwitz and Day, 2001: 91) is provided within the framework of the Center of Science and Art today. This education has similarities with Enderun which includes many significant characteristics of modern education (Enç, 2004: 42). Enderun education is like a pyramid which gets narrower at the top rather than a mass education eğitimi (Özmen and Kömürlü, 2013: 46). Similarly, there is a five-step education program in Bilsem which increasingly focuses on the field of interest among the students. Those steps are as follows: "Orientation", "Support", "Providing Recognition of Individual Abilities", "Developing the Special Abilities" and "Project" programs. During each educational step with durations determined by the center, the programs are evaluated for the students by the teachers during and at the end of the process and evaluation reports are prepared (Davaslıgil, et al., 2004: 61-62).

According to Alexander (1981: 41), two burdens are laid on art educators: The first one is to provide education to mentally talented students (those who get 130 and higher scores in IQ test), the second is to provide necessary art education to the students superior in the field of art. Armed with the same responsibilities, the art educators at Bilsem provide "Discipline Based Art Education" during the stages of Orientation, Support and Recognizing Individual Abilities among the educational steps of Bilsem while they provide art education for art production during the stages of Developing Special Abilities and Project.

For the education of the gifted people in visual arts, "the Discipline Based Art Education" suggested by Clark and Zimmerman (1986: 54) consists art history, art criticism, aesthetic and art applications. This is also accepted by Boland (1986: 22). This education is given to the students who are superior in a field of art as well as mentally talented students. During the stages of Developing Special Abilities and Project, an education for artistic production is given to the students who are superior in the field of art, whose deficiencies were remedied and supported from the point of their interest field.

Orientation program

Using the activities prepared during the education which begins with orientation period, the levels of cognitive alertness, affective, social and psychomotor fields among the students are determined (Bilsem Guidelines, 2007: M. 4-17). In the activities of visual arts, the aim is to provide both the orientation of the students to Bilsem and their friends and to reveal their interests for the visual arts. According to Renzulli and De Wet (2010: 28) who draws attention to the conformity between the education to be given and the readiness of the students, the fields of interest and abilities play an important role in the learning and creativity and that the quality of the education to be given increases in proportion with the level of interest.

In art education, recognizing level of student's readiness is an important step (Cukierkorn, 2007: 1). The level of the students' readiness for the field of art as well as their interests is revealed through "Discipline Based Art Education". In this method, continuous practice develops their expressive strength, art criticism develops their ability to see in depth while the art history enables the students to comprehend the concept of time and space. Aesthetics provide the students the ability to express the qualifications they see. The aim of "Discipline Based Art Education" is to develop the ability of the students in coping with the problems in those four fields (Özsoy and Şahan, 2009: 208-209).

The students are given responsibilities through individual activities as well as group activities and the students are enabled to prove themselves to their other friends in written and verbal expression, painting and shaping. In such a working environment, Bilsem teachers are also enabled to conduct observations on the works and attitudes of the students. Those observations made by

the teachers are collected and used as data in the analysis of the abilities of the students.

Supportive education program

The supportive education is the stage where the students are supported and sorted out according to their interests. In this program, the students are classified into groups according to their performances and interests which were observed during the previous orientation program: and an education program is adopted accordingly.

Since the environment is supportive, flexible and intellectual, it encourages the students, and makes the development of art more effective (Clark and Zimmerman, 2004: 13). The students are encouraged to participate in the art activities, allowed to make mistakes, and use the art materials. While the students have the opportunities to exhibit their creativity in the activities related to art, they are asked questions to make them find specific expressions and ways of solution in the examination of an art work. The students who are responsive in the activities are given responsibilities in the different sections of the applications and they are enabled to find solutions. It is stated that the gifted individuals in the field of art displayed original ideas or innovations and high level of motivation and problem solving ability (Cukierkorn, 2007: 2). The use and development of those characteristics is executed through the prepared visual art activities.

The feedbacks based on the observations and products executed by the educators during and after the process of applying the supportive education are evaluated and the fields of concern and interest among the students are determined (Bilsem Guidelines, 2007: Article 17). This determination is used for the following step of education.

The program for recognizing the individual abilities

Considering the cognitive, affective, social and psychomotor capacities of the students; student groups are formed in accordance with the observations conducted during the orientation and supportive education and determined ability fields. In this program, the field in which the students are talented and their individual ability which have been pre determined.

In order to make the students recognize their individual abilities, visual art activities which highlight their creativity and are related to individual differences are organized. Garcia (2006: 6) states that the individual abilities of the gifted students should be recognized and the student should be individually fed with the core of education from the point of visual ability. It is also stated that the environment should be free from the interference of teachers (Clark and Zimmerman, 1986: 54) and the students should be encouraged to think independently and carry out original activities (Clark and Zimmerman, 2004: 13). For this purpose, the students should be encouraged to study and use the necessary instruments as well as providing convenient environmental conditions for art education.

The feedbacks based on the observations and products executed by the board of teachers during and after the process of applying the supportive education are evaluated and the fields of concern and interest among the students are determined for the following education step.

Program for developing the special abilities

The program related to the development of special abilities is prepared to provide knowledge, abilities and attitudes which are deep and advanced enough to enlarge its contents will be prepared (Bilsem Guidelines, 2007: Article 15). During this period which the

students who have preferred working in the field of art or have been successful in this field receive education for the art production, the existing potentials of the students are turned into performance.

Although "Discipline Based Art Education" is given in the previous periods, an education towards art production is given at this stage and the project period afterwards. Since a well-equipped workshop and working environment without time limitation are important to sort out the art problems (Clark and Zimmerman, 2004: 15-17), the convenient working conditions are provided to the students. While the students are encouraged to use their own perceptions and abilities in the art and create new techniques and forms in art production, at the same time, the students are made to choose their projects from real life and conduct specific activities.

During the process of theoretical activities and applications, the teachers conduct observations on the students and regroup the students for the following period according to their characteristics.

Project production program

In this programme, the aim is to make the students who have gained the basic abilities before the project actualize themselves during the project period and train them as producing and problem solving individuals. Again this period is the time when the students conduct art activities through an internally oriented discipline instead of an externally enforced discipline. This means that the students think independently and creatively and act either individually or in groups. During this period, the main objective is to see to it that the students apply the solution they develop to the projects they choose and learn on their own (Levent, 2011: 96).

Since development of giftedness in the field of art varies among all the students (Clark and Zimmerman, 2004: 16), they are classified into the groups of 3-5 people according to their development, abilities and preferences (Bilsem Guidelines, 2007: M. 17). Thus, the students who are at different development levels of art may work in different groups or individually.

In the art education of gifted people, it is important that students develop working ability independently and alone and focus on completing the work (Cited by: Boland, 1986: 22-23). At this stage, the students are encouraged to decide the period spent on the work; from figuring out the problem and finding the solution to it; which they achieved either as individuals or in groups. This is the factor which shows the eagerness of the gifted students.

An art education activity given during the process of orientation

Through the activity called "A Copying Activity from the Theory of Art", the aim was to study the theories of art and conduct reproduction activity related to the topic. Four teachers also participated in this activity which takes three periods according to Bilsem Guidelines (2007: M. 17).

The students were asked questions such as "Have you been to the exhibitions?", "Which exhibitions did you see?" and the aim was to prepare them for the activity. The answers given by the students were listened to carefully and an opinion was formed about their readiness of and interest in art. The students stated in their answers that they participated in the exhibitions organized by the schools. Three students stated that they visited the exhibitions in the exhibition halls.

By asking the question "Are the exhibitions continuous?", all the students were made to talk about the importance of exhibitions and they were made to participate actively in the lesson. The responses of the students were quite interesting. The expressions of students such as "They are necessary, because we gain information about what the other people are doing" "What does it matter about what

we do if we don't exhibit our products?" was written on the board and responses were discussed.

Using the question "What about visiting an exhibition together now?", the students were prepared to attend the exhibition. The exhibition consisting of five works in four different types in accordance with the theory of art: "Reflective", "Expressionist", "Functional", and "Formalist" which were previously prepared.

After the exhibitions, the students were asked the question "Which exhibition did you like?" and they were asked to explain their preferences. Through the question "What was the reason for your preference?", all the students were made to express their opinions. Among the given answers, it is seen that fourteen students preferred realist and narrative pictures (Pictures 1 and 2). As for the reason, they gave the responses such as "Very realistic", "Convincing", "it is well explanatory" and "It appeals to my feelings" for the 1st and 2nd exhibitions. For the 3rd and 4th exhibitions, they used expressions such as "It is extra ordinary", "It takes me to the other worlds" and "Whenever I look at it I see different things". When the given responses are gathered, the issue "Theories of Art" was presented through active participation of the students.

After the conversations, a student chosen as the secretary was asked to write the name of four theories on the board in the classroom after the question "Which theory would you hang on your wall?" the name of the students were written under the theory they prefer and groups consisting of the students who prefer a similar theory were established. Considering the distributions of girls and boys, the students were classified into the groups of 4 or 5 people, two groups for "Reflective", and a group for each of "Expressionist", "Formalist" and "Functional" theories were formed.

When the activity ended, each student was asked to suggest the next activity to be carried out based on their preferred artist. After the research topic was given, the students were told that the members of the groups could gather in Bilsem on the day that was agreed on in order to conclude their study. Moreover, they were asked to make drawings related to the theory they prefer in the following activity and bring a reproduction of a work from their preferred theory.

In the second stage of the activity, the students were asked whether they liked the activity or not and an introduction was conducted after getting feedbacks related to the activity. Generally, it was seen that the students enjoyed the activity, they prepared for and participated in it. Since students had a pre-knowledge, they immediately wanted to start the application study. Four groups brought copies of the work of the artist they intend to reproduce. The other group stated that they decided what to work on but forgot to make copies of it. After these were sorted out, the acrylic activity was conducted on the 70x100 cm size canvasses.

While working on canvasses, the teacher guided the students. It was understood that art work may not always turn out great and the artists had to repeat their activities so many times; thus, the students were encouraged. When the students asked for help, solutions were discussed without intervening to the work and decisions and preferences were left to the students.

When the lesson ended, it was explained to the students that each group will give presentations on the art theory they researched to the other groups after the reproduction activity was concluded in the following activity and then the lesson was ended.

In the third stage of the activity, the completed works of the students were exhibited in a place where the other students could see. In the second half of the activity, the works which students had previously prepared as the research homework were presented. Each group presented their works within a period of five minutes. When the activity came to a conclusion, the students were asked about the creditable and antipathetic aspects of the activity and they were asked to evaluate the activity. The obtained feedbacks were recorded by the observing teachers in order to determine the interest fields of the students and use it in preparing the next activity and then the lesson was ended after thanking the students.



Picture 1. Reflective, expressionist, functional and formalist art theories exhibition.



Picture 2. The painting practices of the students in Bilsem.

FINDINGS AND DISCUSSION

The activity conducted during the process of orientation consisted of the following stages: students going to the exhibition, making their choices on the art theories, and conducting researches and practicing applications. The activities were conducted so that it as to appeal to the abilities of the students to see, question, and work individually and cooperatively.

On whether the students enjoyed the activity, the students' enthusiasm for the activity, their desire to start the activity immediately, and their waiting for the next activity impatiently all showed that they were interested in the activity. The students answer the questions ambitiously, they freely expressed their ideas, they waited for their turn patiently; summarily, they all liked the activity. The students interacted among themselves, struggled for distribution of tasks, competed for activity roles and come to the activity prepared; these all prove that they have good-participation to the activity. Although there is a little noise especially resulting from the cooperation of the students during the activity, it was seen that the students were generally interested in the activity.

The students' level of readiness were determined through the orientation process and the aimed was to provide the harmonization with Bilsem and their partners.

The responses of the students were patiently listened to and it was seen that the discipline based art education orientation process served its purpose which was to evaluate the students' level of eagerness and to help determine their field of interest. The group work as well as the individual work contributed to the conformance among the students during the activity. The cooperation among the students, their working together, helping one another and sharing with and accepting one another contributed to the adjustment process in Bilsem.

The activity was designed to be beneficial to the students from the points of working individually and in groups, making individual selections and building courage in researching and working. Since group work in the art education is as important as individual work (Clark and Zimmerman 2004: 14), the opportunity to work individually was also given to the students through research homeworks. Due to the the exhibitions they saw and the research topics they conducted, the students consolidated the knowledge that was gained through visual expressions. Leon et al., (2010: 18) stated that the students should be courage to use their knowledge and should solve their problems themselves. In the conducted activity, group activity among the students provided the students the opportunity to have access to the knowledge of the other group members, and use the knowledge to sort out the problems related to the group

and art. The students livened up the activity by providing diversity to the activity through their individual specific contribution. Cukierkorn (2006: 180) posits that the students should have courage against disappointment which may encountered during the art activities. In the conducted activity, the students were guided and encouraged to do much better without being criticized for the mistakes or flaws in their activities.

The activity was initiated by asking questions which the students could easily answer and it was aimed to consistently keep the students active and engaged throughout the activity. The students were allowed to make their choices of art theory without interference. The work and decisions of the students who were continuously encouraged throughout the activity weren't directly interfered. The preferences and the choice of solution to problems were left to the students and their opinions were always regarded. At the end of the activity, the students presented the works they conducted to their colleagues.

At the end of the activity, the questions were asked about the creditable and antipathetic manners of the activity and feedbacks were obtained from the students about the activity. The executed observations and the student feedbacks were kept to determine the interest fields of the students and used in the following activity.

CONCLUSION AND SUGGESTION

It was concluded that the students were eager in the conducted activity, they were free to express their opinions, they came to the courses after doing researches, they like the activity and found it entertaining and enjoyable.

It was concluded that conducting the activity through "Discipline Based Art Education" would be convenient and useful in determining the readiness levels of the students, providing the conformity among the students and determining the interest fields of the students. It was also concluded that "Discipline Based Art Education" was beneficial since the students play active roles, and were guided rather than taught. Moreover, it was concluded that "the Discipline Based Art Education" was beneficial from the points of encouraging the students to succeed in their works, paying attention to their decisions and choices and improving their oratory and presentation abilities.

Because of the advantages of the "Discipline Based Art Education" for students; that is the inclusion of history of art, art criticism, aesthetic and application, it is recommended to use the visual arts of the "Discipline Based Art Education" in all the stages of gifted education. Because the discussion of history of art, art criticism, aesthetic and application in the same topic and in such a manner that they are all interwoven will be of maximum advantage to the student, an activity must be designed by using at least two disciplines of the history of

art, art criticism, aesthetic and application. Because the discussion of history of art, art criticism, aesthetic and application all together provides contribution to the application skills of art education, it is recommended to use the "Discipline Based Art Education" beside the compliance training of Bilsem (Art and Science Center) in the stage of education of support and individual skills. It is also suggested that free working hours and places should be established in Bilsem, so that the students may work in comfort when they get together with their friends and share their opinions and knowledge.

Conflict of Interests

The authors have not declared any conflict of interests.

REFERENCES

- Akarsu F (2004). Those Having Special Talents. (Editors: Şirin M., Kulaksızoğlu A, Bilgili A). Highly Gifted Children Book of Selected Papers. İstanbul: Publications of Children's Foundation, 127-154.
- Ataman A (2007). Highly Gifted Children and Enrichment. (Editors: Ataman A, Aydoğan Y, Bilgiç N). Increasing Professional Qualifications of Teachers in the Science and Art Centres.3-7 September Ankara: Sentez Printing, 13-60.
- Alexander R (1981). An Historical Perspective on the Gifted and the Talented in Art. *Stud. Art Educ.* 22(2):38-48.
- Alshouse M (2008). Art Via Culture: White, Black, and Hispanic Evaluator Interpretation Of Hügh Ability Assessed Through Fifth Grade Student Drawings. Dissertation of Doctor, Drake University School of Education, Des Moines USA.
- Bilsem Directive (2007). (Directive of Science and Art), Republic of Turkey, Ministry of National Education.
- Boland Dale (1986). Artistically Talented Students: A Call For Research. *Working Papers Art Educ.* 5(1):16-25.
- Cukierkorn J (2006). Teaching Talented Art Students: Principles and Practices, *Roeper Rev.* 28(3):180-181.
- Cukierkorn J (2007). Supporting Talent In The Visual Arts. *Friends for Gifted Education Newsletter*, 7(2):1-4.
- Cukierkorn J (2008). Talented Young Artists: Understanding Their Abilities and Needs. *Fall*, 31(4):24-33.
- Clark G, Zimmerman E (1986). Educating Artistically Talented Students. *Stud. Art Educ.* 28(1):53-55.
- Clark G, Zimmerman E (1998). Nurturing the Arts In Programs for Gifted and Talented Students. *Phi Delta Kapan*, 79(10):746-751.
- Clark G, Zimmerman E (2004) Teaching Talented Art Students Principles and Practices. Columbia: Teachers College Press.
- Corlu MS (2010). The Ottoman Palace School Enderun and the Man with Multiple Talents, *Matrakçı Nasuh. Journal of the Korea Society of Mathematical Education Series D: Res. Mathe. Educ.* 14(1):19-31.
- Davaslıgil Ü (2004). Short History of Education of those Highly Gifted in our Country, Preliminary Report of Assessment Commission for Highly Gifted Children, İstanbul: Publications of Children's Foundation, pp. 53-68.
- Demirel Ö (2005). *Education Dictionary (3th Edition)*. Ankara: Pegem Publications.
- Dönmez N (2004). Regulations Required to be Done for the Establishment and Operation of Science Art Centres. (Editors: Kulaksızoğlu A, Bilgili A, Şirin M). I. Children's Congress for Highly Gifted Children of Turkey, Proceedings for Highly Gifted Children. Publications of Children's Foundation, pp. 69-84.
- Enç M (2004). Enderun, (Editors: Şirin M, Kulaksızoğlu A, Bilgili A). Highly Gifted Children Book of Selected Papers. İstanbul: Publications of Children's Foundation, pp. 37-84.
- Enç M (2005). High Brainpower Development and Trainings. Ankara: Gündüz Training and Publications.

- Garcia SA (2006). Gifted and Talented in the Visual Arts, The Identification, Biases, and Recommendations. Thesis of Master The University of Texas At El Paso Department of Art, Texas.
- Hurwitz A and Day M (2001). Children and Their Art Methods Fort He Elementary School (7th Edition). Orlando: Harcourt College Publishers.
- Leon J, Calvo B and Medina C (2010). A Model Project for Identifying Rural Gifted and Talented Students in the Visual Arts. Rural Special Educ. Q. 29(3):16-22.
- Özsoy V and Şahan M (2009). Affect of Multi-disciplinary Education of Art Method on Attitudes of Students in Grade 6 Art Teaching Course, J. Turk. Educators Union 7(1):205-227.
- Özmen E, Kömürlü F (2013). Education Policies and Practices towards Gifted and Talented Students in Turkey, Inonu University J. Faculty of Educ. 14(2):35-56.
- Renzulli J, De Wet C (2010). Developing Creative Productivity in Young People through the Pursuit of Ideal Acts of Learning. P1: KAE, 19:24-72.
- Uzun M (2004). A New Model in the Education of Highly Gifted and Talented Children: Science and Arts Centres. Panel for the Education of Highly Gifted or Talented Children.3-4 May. İzmir, 22-28.
- Yıldırım A, Şimşek H (2005) Qualitative Research Methods In The Social Sciences (5th Edition). Ankara: Seçkin Publications.