

# An Analysis of Graduate Dissertations and Papers Related to Visual Arts Area at Science and Art Centers between the Years of 2007-2017

Yelda Usal<sup>1,\*</sup>, Serap Buyurgan<sup>2</sup>

<sup>1</sup>Faculty of Education, Firat University, Elazığ, Turkey

<sup>2</sup>Faculty of Fine Arts Design and Architecture, Başkent University, Ankara, Turkey

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**Abstract** In the study, the data for the field of visual arts in BILSEM have been revealed by studying postgraduate theses and articles related to the field of Visual Arts given in Science and Art Centers in between 2007-2017. In the research, the document was examined with the scanning model. In the scope of the research, it has been scanned from Google Scholar with keywords such as "BILSEM", "Art Education", "Visual Arts Education" and "Linear Development" in the YÖK database thesis and related theses and articles between the years 2007-2017 examined in terms of type, subject, sample, university and institute, national/ international, thesis method, data collection tools. In laser scanning, Visual Arts given in BILSEM in 2007-2017 years in Turkey related to Education "Science and Art Centers", "BILSEM", "Arts Education", "Visual Arts Education" and "Linear Development" screening using keywords according to the results of 6 theses (4 Master, 2 PhD) and 8 articles have been found. According to the results of the study, it is seen that there are no postgraduate thesis and articles about Visual Arts Education given in BILSEMs in 2009, 2010 and 2011, and studies have been intensified in between 2012-2017.

**Keywords** Visual Arts, Superior Intelligence, Ability, Fine Arts High Schools, Science and Art Centers

## 1. Introduction

Intelligence is an abstract concept that many scientists have been working on for years. Until today, researchers have argued about intelligence by looking at the mental and behavioral structures of the individual. In this context, intelligence is sometimes thought of as a score from a test or adaptation to the environment, and sometimes as a

problem solving ability [1]. According to the understanding of intelligence in traditional structure, intelligence is gained from birth is fixed, cannot be changed, and is measured by tests divided into people as intelligent and non-intelligent. In order to understand this, IQ tests were conducted and people's intelligence was graded. The idea that there is nothing that can be done for those who are not intelligent has determined the position of these people in society. But, Gardner criticized the measurability of human intelligence in his understanding of traditional intelligence, human intelligence cannot be measured with a single instrument, argued that intelligence has a lot of talents [2]. Gardner's new definition, intelligence is that much more than a concept than just an IQ score. This view is also acknowledged by many talented professionals and teachers. Gardner's multiple intelligence theory initially showed 7 types of intelligence. In 1999, this group was added to the 8th type [3]. These include mathematical, logical, visual-spatial and bodily-kinesthetic intelligence about the relationships of objects; verbal-linguistic, musical-rhythmic intelligence and subsequent natural intelligence [4].

*Linguistic-Verbal Intelligence;* An individual's ability to use his mother tongue and other languages, is proportional to the expression's on your mind and capacity to understand other people. This type of intelligence manifests itself with good speaking and writing skills. Having linguistic-verbal intelligence, is skill producing and using language effectively using areas such as concept creation and writing, abstract and symbolic thinking, metaphorical expression, storytelling, grammar knowledge reading poetry, humor, to understand the meanings and norms of words, assessing complex meanings on the ground, thinking and expressing words [5].

*Mathematical-Logical Intelligence;* Today, intelligence is one of the most cognitive skills explaining the most. It includes behavior such as making the analogy, hypothesis

testing, calculation, expressing it in a mathematical formula, generalization, classification, to distinguish the relationships or patterns between concepts and to produce scientific solutions to problems, effective use of numbers, logical thinking, individuals. Mathematicians, accountants, statisticians and computer programmers can be given examples of these intelligent individuals [6].

*Musical Intelligence;* Music intelligence is a type of intelligence that have people using as a musical instrument in the transmission of emotions. These people have rhythm, melody, pitch sensitivity. Instrument playing has the ability as to find similarities of singing songs. Those who are dominant in these intelligences, can musician, chorus soloist, orchestra conductor [7].

*Visual-Spatial Intelligence;* The ability to perceive and reason three-dimensional objects, to think with pictures, images, shapes and lines [8]. Visual intelligence includes behaviors such as drawing, painting and shaping, visual thinking and expressing form properties with forms and graphics. Hunters, scouts, guides, architects, painters and designers can be seen as the dominant individuals in this field of intelligence [7].

*Hysical-Kinesthetic Intelligence;* This is a form of intelligence is related to physical and hand movements. It is argued that it controls and interprets body movements, deals with physical objects, and provides harmony between body and mind. It is suggested that this field of intelligence is advanced individuals when a surgeon performs open heart surgery or the fine-motor control that the pilot shows when fine-tuning the markers on an airplane [9].

*Social-Interpersonal Intelligence;* In group is the ability collaborative work, verbal and non-verbal communication, to understand people's feelings, thoughts and behaviors, share, expressing, interpretation and convince people.

*Intrinsic Self-Interest Intelligence;* Human is the ability their own feelings, the degree of emotional reaction, knowing the process of thinking, be able to self-evaluate and create goals for himself / herself. It covers all of the other intelligence types [8].

*Natural Intelligence;* Gardner's intelligence is an area where the latest definitions. It is the type of intelligence that involves enjoying nature events, and understandable that the individual is in nature. It emerges in the form show interest in this area and identifies different types of, feeling as if nature herself home. Natural scientists, biologists can illustrate this intelligence [10].

These intelligence types, as defined by Gardner, are available to every individual. However, their level may vary from individual to individual. So in some people, one or two of these intelligence types can be more dominant [7]. With this thought in mind, it is understood that many scholars have made definitions related to superior intelligence, if we were to take the diagnosis of gifted and gifted children. At first, it seems that intelligence has changed from a limited perspective, such as receiving high scores from tests that mainly contain academic subjects, to

a transition perspective that includes concepts such as creativity, leadership, and motivation. As the day approaches, it can be said that the definition of superior intelligence has expanded and the concept of superior intelligence has begun to take its place [1]. Regarding gifted child and superior ability have been made many different definitions. In the National Excellence Report published in 1993 by the Federal Government in the United States, it was defined as "Children and young people who are performing at a high level or performing at a higher level than peers with the same age, experience or environmental conditions" a gifted child and superior ability. It can be said that this definition is generally accepted in the World [11].

In the literature, it is generally emphasized that gifted children have reached their developmental stages faster than their normal developmental standards since the first years of life. However, this fast-moving feature may vary according to the type of superior talent; it is unlikely that a child with a special field skill will be able to be fast in all areas of development. For example, although only those gifted in the visual arts show children are superior than their peers in this area, you can follow the rhythm of standard development in other areas of development [12]. We do not have to describe all the features that a child has by looking at or measuring a single determinant feature. A child can show that one or more of the eight intelligence areas may be more capable than their peers, or they may have a certain latent power. For this reason, it is necessary to be very careful in diagnosing and classifying gifted and gifted children [13]. According to Clark and Zimmerman, not all gifted children have artistic ability, but all children with superior artistic ability are on the IQ level average. Because there is no significant connection between high intelligence and high IQ in the world, children with high talent in the field of art are like children who are academically superior intellectually threefold. First of all these children develop early. Secondly, they have an enthusiasm to be a master. Third, they "go their own way". That means; do not learn faster than ordinary children, learn them differently [10]. Considering artistic skill, Ellen Winner compared superior art students with academic superior students. Both groups developed mentally early, there are individuals who think differently and overcome enthusiasm for success. However, it can be said that IQ has very little share in the work of young artists [3].

It is through a well-equipped education that acquiring knowledge and producing information. Studies of gifted individuals reveal that in the last 15-20 years the countries of the world have given more importance to the superior and special talented individuals and have developed special training methods and tools since infancy [14]. In many countries sports, music, visual arts with in science and mathematics exhibiting superior talent are widely seen different educational practices at the first or secondary level. In particular, the former SSCB or present-day

Russian have made a part of the tradition of offering different education to young learners from a wide range of geographical areas in foreign languages, arts and sports. Countries such as Sweden, Norway, Denmark and the Netherlands have solved their education of superior talent through individualization within formal teaching. Formal education of gifted education fused with the most compatible format, Canada of one of the countries where the application of educational theory with scientific data. Especially in the province of Ontario, educational experiences are presented to students differentiated in terms of scope, depth, speed and diversity. A coordinator has been established in schools to ensure that the program complies with the school. As a result, a group of teachers and students are on the one hand using this special program while continuing their normal education with their peers in areas where they do not show superior talent. In China, which began in 1973 and developed over time despite previous prohibitions of differentiation, the superior talents were selected by examinations and subjected to a separate training middle and high school level, there is a center for the study of these issues with the school. Selective schools are opened for such children in some countries (Such as the UK, Australia, New Zealand), mother-father associations and research centers are opened, society and government are scheduled to publications about the necessity and benefits of gifted education [15].

When we look at the historical process of superior talent education in our country, it is seen that the prideful works were with the Enderun Mektebi during the Ottoman period. Enderun Mektebi has also cultivated the palace architect, poet, clerk, historian, nakkaşını, musician and painter as well as educating qualified people who need the state [15].

When we look at the history of the Republic, we see that there is no practice for special education until 1956. After 1956 law no. 6660 for special education has attracted attention Ankara Science High School Project and Custom Class implementation. The only application pre-Bilsem for superior talents in visual arts is the legal regulation numbered 6660. July 7, 1948 at the historic Grand National Assembly of Turkey has realized forwarding two gifted children and they decided to study abroad. In 1956, this law was replaced by Law No. 6660; its implementation is also subject to a special regulation. Thus, in visual arts, the first educational arrangement for gifted students was realized. This arrangement provides legal opportunities to be given education at home or abroad for children who have extraordinary special talent in the fields of music and painting [16]. Biret and Suna Kan, who are highly skilled in the field of music provided to foreign countries by the state account with the law numbered 5245 which entered into force in 1948 [17].

Turkey has increased rapidly in recent years the interest for gifted children and their education. This is not limited to educators interested in the Grand National Assembly of Turkey (TBMM), Ministry of National Education (MEB)

and the Scientific and Technological Research Council of Turkey (TUBITAK) is also observed that the level of [18].

Basic principles of Turkish education system; includes education the needs of the individual and society, orientation, education right, opportunities and opportunities equality, continuity, democracy education, secularism, scientificness, planning, mixed education, school and community cooperation and everywhere [14].

The province of Anatolian Fine Arts High School was opened in Istanbul on 16 October 1989. During the academic year of 1990-1991, Ankara, İzmir, Eskişehir, Bursa and Kütahya were opened and the number was increased to six [19]. Anatolian Fine Arts High Schools, whose number of private and state boundaries are increasing day by day opened base on Article 33 of the Basic Law of National Education are secondary education-related educational institutions. Article 33 states: "Separate schools can be opened at basic and secondary levels to educate youngsters of children with special skills and abilities in the field of fine arts or separate breeding precautions may be taken. As a matter of their nature, their principles related to establishment, operation and training are regulated by a separate regulation" [19]. In the Anatolian Fine Arts High Schools regulation published in Official Gazette on September 21, 1990: Anatolian Fine Arts Higher education institutions applying the programs for fine arts are preferred, it opens in the regions suitable for fine arts activities. The period of study of Anatolian Fine Arts High Schools is four years, one year preparation for secondary school [10]. The opening of Anatolian Fine Arts High Schools, in terms of orientation of talented students after primary education, in the field of art education it is perhaps one of the most important developments in Turkey. The purpose of the school (Communiqué No: 2323 dated October 15 1990) is to improve the creative, constructive and interpreting ability of talented students in Fine Arts Branches. Schools can have phonetics (music), plastic arts (painting-sculpture), drama (stage and image) arts departments. Again in schools, education is organized in the form of joint courses, art courses, elective courses, field applications and activities [20]. The purpose and task of the school again was determined as: "To provide education for students with interests and talents in the field of fine arts, directing students to researchers and developers, to be able to make choices, independent, correct, interpretive and practical in the direction of their talents, to help students understand and understand the national and international, historical and new works of art" [21].

In 1996, the studies started with the "Development of Special Abilities of Primary Education Students" by the Ministry of National Education General Directorate of Special Education Guidance and Counseling Services, later the Ministry of National Education's Science and Art Centers Directive was put into effect with the decision of the Board of Education and Education Board dated

25.10.2001 and numbered 012648. Yasemin Karakaya is the Science and Art Center, which has been training with 45 students in the Science and Art Centers serving the talented children [10]. Science and Art Centers are the centers where students with superior and special skills (painting, music and general mental ability) in pre-school, primary school and middle school and high school are educated in terms of their interest and ability in time outside formal education [14]. Science and arts centers, which offer a differentiated educational program beyond the school-based education for special talented students to understand their potential and contribute to them and collectively, serve in 81 centers and 116 centers [22]. The selection of students for Science and Art Centers starts with the determination of the students who are nominated by science and art centers according to their talents by their class teachers. This selection takes place in three stages: filling out observation forms according to skill areas, group screening, individual assessment. The students in the center are selected by the Ministry of National Education at the 1st, 2nd and 3rd grade levels by individual evaluation respectively group scanning application with tablet computer, individual evaluation of the students who succeeded in group screening according to their skill areas and for students who are successful in group screening (general mental, artistic and musical talent) at the date and time reported to him [22].

The main aim of the activities of Science and Art Centers is to produce and develop projects. In order to gain knowledge and skills in project preparation and development, project directors are prepared and presented with the necessary preliminary learning through the leading teachers in the institution. Determination of project topics, the selection and the surrounding businesses in developing made cooperation with evaluating, universities, institutions and organizations. Projects can be developed from time to time at the relevant workplaces, as well as expert support from practitioners when necessary. Leading teachers set project issues by taking into account students' suggestions [14].

Science and Art Centers in different areas related to have been found to do a lot of research. However, Visual Arts on the field of related to has not been reached a great deal of research. When at the data obtained as a result of thesis and article scanning looking, the lack of a number of post-graduate studies confirms this. Also in different areas of the document review process in Turkey, where research has been conducted related to the education of gifted talented and visual arts, but it was seen that there was not a review to collect the researches of the post-graduate education (Thesis and Article) related to Visual Arts Education given in Science and Art Centers. From this point of view, theses and articles related to education Visual Arts given Center of Science and Art in Turkey made a multidimensional examination; the following questions were sought in response to this objective:

Articles and theses:

1. What is the distribution according to years of construction?
2. What is the distribution of the subject according to years?
3. What is the distribution of the sample group according to years?
4. What is the distribution of methods according to years?
5. What is the distribution of data collection tools according to years?
6. What is the distribution of theses by universities and institutes according to years?
7. What is the national or international distribution of the articles according to years?

## 2. Method

### 2.1. Research Model and Working Group

In this study, a scanning model and a document review were conducted from quantitative research methods. The method of this research was chosen by scanning the methods used in similar studies. The screening model includes studies aimed at collecting data to determine specific characteristics of a group [23]. Document analysis includes analysis of written materials that contain information about facts and phenomena targeted for investigation [24]. If the documents examined in this study, in accordance with the purpose of the study, Postgraduate theses registered in the database of the Council of Higher Education Board and Google Scholar registered articles. The study's study universe, between 2007 and 2017, it has been producing postgraduate dissertations and articles on Visual Arts education given at Science and Art Centers. There was no way to sample in the survey, "The self-imitating universe" [25] has been accepted as a study universe.

### 2.2. Data Collection and Analysis

In order to evaluate theses and articles about the field of Visual Arts given in Science and Art Centers (2007-2017) YÖK database and Google Scholar have been scanned with keywords "Science and Art Centers", "BİLSEM", "Art Education", "Visual Arts Education" and "Linear Development". As a result of the scan, between 2007 and 2017, 6 theses and 8 articles related to the field of Visual Arts given in Science and Art Centers were reached. The research data were obtained with the "Publication Classification Form (BİLSEM-GSYSF)" prepared for the answers of the questions in the sub-problems. The form included the name, year, keywords, university, institute, subject, method, data collection tool and sample of the research; f and % are given and evaluated.

### 2.3. Limitations

The theses enrolled in the YÖK database in the last 10 years (2007-2017) related to the field of Visual Arts given in Research, Science and Art Centers and the articles in Google Scholar is limited to publications obtained by scanning key words "Science and Art Centers", "BILSEM", "Art Education", "Visual Arts Education" and "Linear Development".

### 2.4. Findings

In the findings of the study, are included in evaluation of with Publications Classification Form (BILSEM-GSYSF) of dissertations and articles related to the field of Visual Arts given in Science and Art Centers.

According to Table 1, when we look at the distribution of theses and articles about Visual Arts Education given in BILSEM between 2007-2017 according to the years seems in 2012, 21% of the Master's, Doctoral Thesis and articles were made; In 2017 only 28% of articles were made; In 2007, only 7% of the graduate students were made. It is also understood that done in the table no postgraduate theses and articles on Visual Arts Education given in 2009, 2010 and 2011 at BILSEM.

In Table 2, the topics of the articles and theses are presented. According to the table, the study subjects differ between 2007-2017, it is observed that only interdisciplinary education in the years 2013 and 2014 is 14.30% and in 2015 and 2017 researches are conducted in the same field of student opinion.

According to Table 3, the sample group is composed of 28.6% students and document document in 2017, It is understood that in 2012 there were 21. 42% student, document / document, teacher / student sample group.

According to Table 4, the research methods used in the research conducted between 2007-2017 show differences. It is seen that qualitative and quantitative methods are used in 28.7% in 2017 and mixed methods are used in 2013 and 2014.

It is understood that 50% of the studies done between 2007-2017 years are quantitative, 35.71% qualitative and 14.29% worked with mixed method.

According to Table 5, the theses about the Visual Arts education given in BILSEM were made at Educational Sciences Institute, it is seen that no university in the same tabloday has completed the thesis at the Institute of Educational Sciences in 2009, 2010, 2011, 2014, 2016 and 2017.

According to Table 6, according to the years / years distribution of the national / international articles on Visual Arts education given in BILSEM we see that both national and international articles were made equally in 2017 with a maximum of 50%. Secondly, from 25% to 2014, both national and international articles were made equally.

When we look at Table 7, in the distribution of the data collection tool of the works by years, 28% up to 2017 years without painting, interview form and data collection. Moreover, when we examine the table, we see that more than one tool is used as data collection tool.

**Table 1.** The distribution of articles and theses related to visual arts education given in BILSEM between 2007-2017 according to the years in which they were made:

Years	Theses				
	Graduate	Doctorate	Articles	f	%
2007	1	-	-	1	7
2008	1	-	-	1	7
2009	1	-	-	-	-
2010	-	-	-	-	-
2011	-	-	-	-	-
2012	1	1	1	3	21
2013	-	1	-	1	7
2014	-	-	2	2	14
2015	1	-	-	1	7
2016	-	-	1	1	7
2017	-	-	4	4	28
Total	4	2	8	14	100

**Table 2.** The distribution of articles and theses related to Visual Arts education given in BİLSEM between 2007-2017 according to years:

Case Study	Years											Total	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	f	%
Painting skill	-	-	-	-	-	-	-	-	-	-	1	1	7.14
Interdisciplinary teaching	-	-	-	-	-	-	1	1	-	-	-	2	14.30
Visual perception and awareness	-	-	-	-	-	-	-	1	-	-	-	1	7.14
Diagnostic	-	-	-	-	-	-	-	-	-	1	-	1	7.14
Gifted Edu. and training in Turkey	-	-	-	-	-	1	-	-	-	-	-	1	7.14
Support Training phase	-	-	-	-	-	-	-	-	-	-	1	1	7.14
Visual intelligence	-	-	-	-	-	-	-	-	-	-	1	1	7.14
Student Opinions	-	-	-	-	-	-	-	-	1	-	1	2	14.30
Linear Development	-	1	-	-	-	-	-	-	-	-	-	1	7.14
Teacher Opinions	1	-	-	-	-	-	-	-	-	-	-	1	7.14
Project Based Learning	-	-	-	-	-	1	-	-	-	-	-	1	7.14
Educational Qualification	-	-	-	-	-	1	-	-	-	-	-	1	7.14
Total	1	1	-	-	-	3	1	2	1	1	4	14	100

**Table 3.** Distribution of samples and theses related to visual arts education given in BİLSEM between 2007-2017 according to years:

Years	Sampling Group				Total	
	Student	Document	Teacher	Teacher /Student	f	%
2007	-	-	1	-	1	7.14
2008	1	-	-	-	1	7.14
2009	-	-	-	-	-	-
2010	-	-	-	-	-	-
2011	-	-	-	-	-	-
2012	1	1	-	1	3	21.42
2013	-	-	-	1	1	7.14
2014	1	1	-	-	2	14.28
2015	1	-	-	-	1	7.14
2016	-	1	-	1	2	7.14
2017	2	2	-	-	4	28.60
Total	6	5	1	3	14	100

**Table 4.** Distribution of articles and thesis methods related to Visual Arts education given in BİLSEM between 2007-2017 according to years:

Years	Working Method			Total	
	Qualitative	Quantitative	Mixed	f	%
2007	1	-	-	1	7.14
2008	1	-	-	1	7.14
2009	-	-	-	-	-
2010	-	-	-	-	-
2011	-	-	-	-	-
2012	1	2	-	3	21.42
2013	-	-	1	1	7.14
2014	-	1	1	2	14.28
2015	-	1	-	1	7.14
2016	-	1	-	1	7.14
2017	2	2	-	4	28.60
Total	5	7	2	14	100

**Table 5.** Distribution of the universities and institutes of the thesis about visual arts education given in BİLSEM between 2007-2017 according to year.

Years	University				Total		Institute Educational Sciences	Total	
	Gazi	19 Mayıs	Selçuk	Marmara	f	%		f	%
2007	1	-	-	-	1	16.66	1	1	16.66
2008	1	-	-	-	1	16.66	1	1	16.66
2009	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-
2012	1	1	-	-	2	33.36	2	2	33.36
2013	-	-	1	-	1	16.66	1	1	16.66
2014	-	-	-	-	-	-	-	-	-
2015	-	-	-	1	1	16.66	1	1	16.66
2016	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-
Total	3	1	1	1	6	100	6	6	100

**Table 6.** Distribution of the national / international status of the articles on visual arts education given in BİLSEM between 2007-2017 by years.

Years	National	International	f	%
2007	-	-	-	-
2008	-	-	-	-
2009	-	-	-	-
2010	-	-	-	-
2011	-	-	-	-
2012	-	1	1	12.5
2013	-	-	-	-
2014	1	1	2	25
2015	-	-	-	-
2016	1	-	1	12.5
2017	2	2	4	50
Total	4	4	8	100

**Table 7.** Distribution of data collection tools according to years of studies on Visual Arts education given in BİLSEM between 2007-2017.

Years	Data collection tool					Total	
	Picture	Interview form	Survey	More than one	Unspecified	f	%
2007	-	-	-	1	-	1	7.14
2008	-	-	-	1	-	1	7.14
2009	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-
2012	-	-	1	1	1	3	21.42
2013	-	-	-	1	-	1	7.14
2014	-	-	-	1	1	2	14.28
2015	-	-	-	1	-	1	7.14
2016	-	-	-	-	1	1	7.14
2017	1	1	-	-	2	4	28.6
Total	1	1	1	6	5	14	100

### 3. Conclusions and Recommendations

In Turkey, between the years 2007-2017 as a result of the analysis of studies related to Education in the Visual Arts thesis SACs 6 (4 MSc, PhD 2) and 8 articles were found. In this study, "Science Art Centers, "BILSEM", Sanat Art Education", Visual Arts Education and "Linear Development keywords were used.

According to the results of the research, no postgraduate theses and articles about Visual Arts Education given in 2009, 2010 and 2011 were given, between the years of 2012-2017 work has been intensified. The study topics of the researches carried out between 2007-2017, collected under 12 headings; interdisciplinary teaching and student views are the most studied topics; thesis and articles seen intensely on student and document / document sampling group. Qualitative and quantitative research methods were used in the studies, It was observed national and international articles on visual arts education in Science and Art Centers between 2014 and 2017 and the theses are only made in the institute of educational sciences.

Which are related to Visual Arts Education is given in BILSEM theses and articles in the light of the data obtained from the document analysis gifted in Turkey Visual Arts has been found that the studies related to education is extremely low. In order to increase the efficiency of the visual arts education programs given in Science and Art Centers, it is important that these institutions are investigated and evaluated from different perspectives on student acquisition, space and physical equipment, programs, and teachers' development.

- Researches made with BILSEMs require studies from the perspective of the manager and the parents as a sample. There are also very few studies for teachers. In this context, it is important for researchers to obtain positive and necessary data on BILSEM from the perspective of teachers, administrators and parents.
- In order to further strengthen the Visual Arts Education in Science and Art Centers, research should be promoted to improve interdisciplinary teaching, visual perception and awareness, and the creative and interpreting aspects of students.
- Science and Art Advisory Boards consisting of the relevant department chairs of the universities should be established in cooperation with the Ministry of National Education and the University. These boards, which will be formed in the fields of art and science, will provide diagnosis, programs, and in-service courses for teachers. will play a positive role in increasing the efficiency of institutions in many ways.

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