

#### Research Article

# An Investigation on Metaphorical Perceptions of Gifted Students towards the Concepts of Social Studies Course, Social Studies Teacher, and Science and Arts Center <sup>1</sup>

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The aim of this study is to identify metaphorical perceptions of the gifted students enrolled in Science and Art Center (BILSEM) towards the concepts of Social Studies course, Social Studies teacher, BILSEM. In line with this aim, gifted students were asked to produce metaphors about the concepts of Social Studies course, Social Studies teacher and BILSEM. This study adopted a phenomenological approach, which is one of the qualitative research methods, and the data were collected through metaphors. The study was carried out with 49 students (29 females, 20 males). The students were administered a form that included incomplete sentences such as "Social Studies course is like... because...", "Social Studies teacher is like...because..." and "BILSEM is like...because...". The collected data were analyzed using content analysis methods. Results show that gifted students who are enrolled in BILSEM have positive attitudes towards the concepts of Social Studies course, Social Studies teacher, and BILSEM.

#### **Keywords:**

gifted children, science and art center (BILSEM), social studies course, social studies teacher, metaphor

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#### Introduction

It is important for countries to raise individuals who improve themselves, who are qualified, who are aware of their own differences, and who use these differences for the improvement of society. Gifted individuals are different from other individuals in society in the intelligence, creativity, leadership, and special academic areas. The concept of giftedness is defined differently according to individuals, societies and disciplines. While some definitions define intelligence quantitatively, some others evaluate and define it qualitatively (Sak, 2012). For instance, Council for Gifted and Talented Children in the United States of America defines a gifted individual as "one who shows extraordinary performance in one or more areas or who has an extraordinary potential". On the other hand, another research group called Columbus defines giftedness as "asynchronous development in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm" (Sak, 2012). In Turkey, instead of superior-high intelligence or talent concepts, special talent concept is preferred, and it is defined as "a gifted individual is a person who displays higher performance than peers in intelligence, creativity, art, sports, leadership capacity, or special academic areas (MoNE,2016). While these individuals are given special education in Science and Arts Centers (BILSEM) in our country, they are also provided with inclusive education, in and out of school enrichment programs, support education programs, talent workshops, support education rooms, education areas talent groups, distance education, and mentoring support.

Science and Arts Centers are independent special education institutions which were founded in order for preschool, primary, secondary and high school students with special abilities to become aware of their individual abilities, improve their capacity and use it at highest level (MoNE, 2016). BILSEMs aim at providing gifted and talented students with enriched education out of school hours, without separating them from their peers. Students who come to BILSEM from the grades determined by the Ministry go through a number of education steps that reveal their potential. The students, who are accepted from three different talent areas, start with the orientation program phase in which they learn about the center, programs, teachers, and other students. Secondly, in the support education program the students are provided with skills training such as communication, collaboration, teamwork, learning to learn, problem solving, scientific research, entrepreneurship, critical and creative thinking,

effective decision making, technology literacy, social responsibility, and effective use of sources. Thirdly, they are accepted to the Recognition of Individual Talents program (BYF-RIT). This program includes the preparation and application of

programs for the disciplines that prioritize students' awareness of their creativity and individual talents.

The program organizes activities in order to identify the skills in relation to the areas in which students are mostly interested, have talent, and could do research in the future. Students who complete this program move to the Development of Special Talents program (OYGP-DST). Students attend this program, which aims to improve special talents, when those in Music and Visual Art talent areas have completed the orientation program and when those in the general cognitive skills area have completed the Recognition of Individual Talents program. This phase enables students to obtain in-depth, advanced knowledge, skills and behaviours in the discipline(s) they were guided and to produce in this way. Finally, the students attend the Project Development and Management Education Program so that they become individuals who learn by doing and experiencing, produce solutions to problems, think in a creative way, communicate with people around, and do scientific research and exploration (MoNE 2017).

Gifted and talented individuals could become emotionally and cognitively happy and beneficial to society when they are given the opportunity to reveal their potentials, improve their talents, are provided with the opportunity to work with gifted individuals like themselves, and produce projects. Otherwise, when they are not given the appropriate educational opportunities, these individuals could waste their potential in illegal environments and face the danger of experiencing academic failure.

While societies consider the positive sides of being gifted and talented individuals, they might ignore the difficulties that are faced by the gifted and talented. When their features to improve them and bring success are not supported, or when they are not understood, gifted and talented individuals might demonstrate unwanted behaviours. Blass (2014) report that gifted students are a highly intelligent and talented minority group whose needs are not usually recognized and met well. Blass (2014) states that this student group with various backgrounds, socioeconomic status and abilities could experience social-emotional difficulties such as peer rejection, isolation, stress, anxiety, depression and destructive perfectionism.

Metaphors could be utilized in order to understand gifted and talented individuals' feelings and thoughts. Metaphor is an individual's expressing a concept or phenomenon by describing it (Forcenville, 2002). Metaphors help students to express abstract concepts by using concrete concepts (Soysal and Afacan, 2012). Metaphor is also an individual's expressing a concept or phenomenon as s/he perceives it (Forcenville, 2002). Metaphors are also defined as the meaning transfer from one object with perceptional similarity to the other (Gök&Erdoğan, 2010).

In this regard, the purpose of this study is to identify metaphorical perceptions of gifted students towards the concepts of Social Studies course, Social Studies teacher and Science and Arts Center (BILSEM).

Results obtained from this study are believed to contribute to the literature in terms of making perceptions of gifted students towards the abstract concepts of Social Studies course, Social Studies teacher and Science and Art Center concrete ones. In addition, it is known that students' attitudes towards courses, teachers, and the schools they attend affect their success. In this regard, investigation of perceptions of gifted students towards the concepts of Social Studies course, Social Studies teacher and Science and Arts Center could also provide information about their attitudes.

#### Method

This study adopted a phenomenological approach, which is one of the qualitative research methods, and the data were collected through metaphors. Phenomenological approaches aim to identify and reveal individuals' experiences, perceptions and meaning attributions about a phenomenon. The source in phenomenological studies is the people or groups that are in the phenomenon investigated and that reflect the phenomena. Phenomenological studies enable to reveal experiences and meanings through data analysis. Results emerge descriptively, and direct quotes are utilized. Although phenomenological studies do not provide clear and generalizable results, due to the nature of qualitative studies, they do provide data to understand the phenomenon under investigation. Collecting data through metaphors has a descriptive role in qualitative studies. When metaphors are used descriptively, they describe and picture the event or phenomenon as they exist (Yıldırım &Şimşek, 2012).

# **Participants**

This study was conducted with 49 students who were enrolled in BILSEM in the 2016-2017 education year. Demographic features of the participants are given in Table 1.

**Table 1.**Demographic features of the Students participating in the Study

Variable	Demographic feature	f	0/0
Gender	Female	29	59,2
Gender	Male	20	40,8
	Support Education Program	15	30,6

Education Field	Recognition of Individual	34	60.4
(Phase)	Talents program	34	69,4
0.11	Public school	25	51
School	Private school	24	49
	4th grade	14	28,6
Grade	5th grade	20	40,8
Grade	6th grade	6	12,2
	7th grade	9	18,4
	Primary School	2	4,1
	Secondary school	0	0
Mother's education	High school	12	24,5
Level	University	28	57,1
	Master's degree	5	10,2
	Doctorate	2	4,1
	Primary school	2	4,1
	Secondary school	2	4,1
Father's education	High school	7	14,3
Level	University	31	63,3
	Master's degree	3	6,1
	Doctorate	4	8,2

As it is seen in Table 1, 29 participants were female and 20 participants were male. Of all these students, 15 were enrolled in the Support Education Program, and 34 were in the Recognition of Individual Talents program. In addition, 25 students attended state schools, and 24 attended private schools; 14 students were 4th graders, 20 students were 5th graders, six students were 6th graders, and nine students were 7th graders. An analysis of mother's education level showed that 28 mothers graduated from university and 12 from high school; 5 had master's degree and two had doctorate degree; and two mothers graduated from primary school. As for father's education level, 31 fathers graduated from university and seven fathers from high school; three fathers had master's degree; two had doctorate degree; two graduated from secondary school and two from primary school. These findings suggest that parents' education level is high.

#### **Data Collection**

The study collected data through metaphors. To do so, the data were collected through the metaphor questionnaire form which was prepared by the researcher in line with the related literature and expert views. The first part of this form includes information about students' personal characteristics. The second part of the form had incomplete sentences such as "Social Studies course is like... because...", "Social Studies teacher is like...because..." and "BILSEM is like...because...". The students were given sufficient time before the forms were collected.

#### **Data Analysis**

The metaphors developed by the students who participated in the study were analyzed using content analysis methods.

- First of all, the 147 metaphors developed by 49 students were put in alphabetical order. Logical foundations of the metaphors were analyzed, and 8 metaphors which did not comply with the logical foundation or which lacked logical foundation were excluded.
- When these excluded metaphors were identified, the remaining 139 valid metaphors were listed and the number of students (f) and percentages (%) that represented each metaphor were calculated.
- Finally, the metaphors that had common characteristics were gathered under a certain category. To enhance reliability, the data were coded by a second coder, and the reliability between the two coders was found 92% (Reliability=Agreement/ (Agreement Disagreement \*100) (Miles & Huberman, 2002).

# **Findings**

This section presents findings about the metaphors developed by gifted and talented students regarding their perceptions about the concepts of Social Studies course, Social Studies teacher, and Science and Arts Center (BILSEM). Table 2 displays distribution of the metaphors according to the concepts.

**Table 2.**Distribution of the Metaphors according to the Concepts

Concepts	Number of Metaphors	0/0
Social Studies Course	49	35.25
Social Studies Teacher	46	33.09
BILSEM	44	31.65
Total	139	100

An analysis of Table 2 shows that there were 49 metaphors about the Social Studies course, 46 metaphors about the Social Studies teacher, and 44 metaphors about BILSEM.

# Metaphoric Perceptions of Gifted Students about the Concept of Social Studies Course.

Table 3 presents findings about the metaphors developed by gifted students about the Social Studies course.

**Table 3.** *Metaphors about the Concept of Social Studies Course* 

Item	Metaphor	f	%		Item	Met	f	%	
No					No	aphor			
1	Life	6	12.24	21		Sun light		1	2.04
2	Map	4	8.16	22		Life and		1	2.04
						History			
3	Encyclopedia	2	4.08	23		Meaning of		1	2.04
						Life			
4	Archaeological	1	2.04	24		Course form		1	2.04
	Dig					of Life			
5	5000 pieces	1	2.04	25		Pencil case		1	2.04
	puzzle								
6	Kindergarten	1	2.04	26		Book of Law		1	2.04
7	Chimney	1	2.04	27		Pages of a		1	2.04
						book			
8	Crossword	1	2.04	28		Book		1	2.04
	Puzzle								
9	Magnifier	1	2.04	29		User's guide		1	2.04
10	Bag	1	2.04	30		Library		1	2.04
11	Lesson	1	2.04	31		Furniture		1	2.04
12	World	1	2.04	32		Ocean		1	2.04
13	Traveling	1	2.04	33		Game		1	2.04
	around the world								
14	Parent	1	2.04	34		Left brain		1	2.04
15	An old book	1	2.04	35		Umbrella		1	2.04
16	Universe	1	2.04	36		History		1	2.04
17	Different Idea	1	2.04	37		Test book		1	2.04
18	Boat on a lake	1	2.04	38		Life		1	2.04
19	Life couch	1	2.04	39		Time		1	2.04
						Machine			
20	Sea	1	2.04	40		Richness		1	2.04
						Total		49	100

Table 3 indicates that the participants developed 40 different metaphors about the Social Studies course. Of these metaphors, life was mentioned 6 times, map 4 times and encyclopedia 2 times; the other metaphors were mentioned once. Logical foundations of the metaphors developed by the students were analyzed, and codes were formed. The metaphors developed by the students about the Social Studies course were classified under 8 conceptual categories which are presented in Table 4.

**Table 4.**Conceptual Categories of the Metaphors about the Social Studies Course

Categories	Metaphors	f	%
1. For real life	Life (5), Course form of Life (1),		
	User's Guide (1), Magnifier (1),		
	Kindergarten (1), Life couch (1), Life	14	27.45
	(1), Furniture (1), Umbrella (1),		
	Parent (1).		
2. Comprehensive	Universe (1), World (1), Richness		
	(1), Course form of Life (1), Time		
	machine (1), Traveling around the	12	22.52
	world (1), Life and history (1), Ocean	12	23.52
	(1), Life (1), Encyclopedia (1),		
	Course (1), Pencil case (1).		
3. Informative	Pages of a book (1), Chimney (1),		
	Crossword (1), Test book (1), Left		
	brain (1), Book (1), Bags (1),	10	19.60
	Archaeological Dig (1), Game (1),		
	Book of Law (1).		
4. Field Course	An old book (1), history (1),		
	Encyclopedia (1), Meaning of Life	6	11.76
	(1), Map (1), Life (1).		
5. Guiding and	Map (2), Sun light (1).	3	5.88
Enlightening		3	3.00
6. Interdisciplinary	Library (1), Map (1).	2	3.92
7. Student-centered	Boat on a lake (1), Different Idea	2	2.02
	(1).	2	3.92
8. Complicated	Crossword (1), 5000 pieces puzzle	2	2.02
<u> </u>	(1).		3.92
	Total	51	100

An analysis of Table 4 shows that the metaphors about Social Studies course were gathered under for real life, comprehensive, informative, field course, guiding and enlightening, interdisciplinary, student-centered, and complicated categories.

# Category 1: Being for Real Life.

This category is composed of 10 metaphors. Frequencies of the metaphors in this category were as follows: Life (5), Course form of Life (1), User's Guide (1), Magnifier (1), Kindergarten (1), Life couch (1), Life (1), Furniture (1), Umbrella (1), Parent (1). One of these metaphors is as follows:

"...Social Studies course is like a life couch. It gives us information about life; it teaches us... just like a couch in a match" (MS1)

# Category 2: Comprehensive.

This category is composed of 12 metaphors. Frequency distribution of the metaphors that form this category include Universe (1), World (1), Richness (1), Course form of Life (1), Time Machine (1), Traveling around the world (1), Life and History (1), Ocean (1), Life (1), Encyclopedia (1), Course (1), Pencil case (1). One of these metaphors is as follows:

"Social Studies course is like an ocean because it has increasingly expanding and deepening information..." (MS3).

# Category 3: Informative.

This Category consists of 10 metaphors. Frequency distribution of the metaphors that form this category include Pages of a book (1), Chimney (1), Crossword (1), Test book (1), Left brain (1), Book (1), Bag (1), Archaeological Dig (1), Game (1), Book of Law (1). One of these metaphors is as follows:

"...Social Studies course is like a chimney because the smoke it produces distributes knowledge (FS7).

# Category 4: Field Course.

This Category consists of 6 metaphors. Frequency distributions of the metaphors that form this category include An old book (1), History (1), Encyclopedia (1), Meaning of Life (1), Map (1), Life (1). One of these metaphors is as follows:

"...Social Studies course is like an old book because it tells us about our history and things happened before us" FS17).

# Category 5: Guiding and Enlightening.

This Category consists of two metaphors. Frequency distribution of the metaphors that form this category include Map (2), Sunlight (1). One of these metaphors is as follows:

"...Social Studies course is like sunlight because it enlightens our way with the information it has" (FS10).

# Category 6: Interdisciplinary.

This Category consists of two metaphors. Frequency distribution of the metaphors that form this category include Library (1), Map (1). One of these metaphors is as follows:

"...Social Studies course is like a library because it is a course which has all kinds of information..." (FS16).

# Category 7: Student-centered.

This Category consists of two metaphors. Frequency distribution of the metaphors that form this category include Boat on a Lake (1), Different Idea (1). One of these metaphors is as follows:

"...Social Studies course is like a boat on a lake because it is you who has the control in Social Studies course. Heading towards the information in Geography and History is in your hands (FS8).

# Category 8: Complicated.

This Category consists of two metaphors. Frequency distribution of the metaphors that form this category include Crossword (1), 5000 pieces puzzle (1). One of these metaphors is as follows:

"...Social Studies course is like a 5000 pieces puzzle because it is so complicated..." (MS7).

# Gifted Students' Metaphoric Perceptions about the Concept of Social Studies Teacher.

Table 5 demonstrates findings about the metaphors developed by the gifted students regarding the Social Studies Teacher.

**Table 5.** *Metaphors about the Concept of Social Studies Teacher* 

Item No	Metaphor	f	0/0	Item No	Metaphor	f	0/0
1	Lamp	3	6.52	20	Life teacher	1	2.17
2	Sun	3	6.52	21	Speaking book	1	2.17
3	Book	2	4.34	22	Microscope	1	2.17
4	Compass	2	4.34	23	Candle	1	2.17
5	Friend	2	4.34	24	Neo (a Matrix character)	1	2.17
6	Family	1	2.17	25	Ottoman Emperor	1	2.17
7	Flame	1	2.17	26	Cotton	1	2.17
8	Mother	1	2.17	27	Curtain	1	2.17
9	Encyclopedia	1	2.17	28	Piñata	1	2.17
10	Father	1	2.17	29	Guide	1	2.17
11	Baklava	1	2.17	30	Picture	1	2.17
12	Brain	1	2.17	31	Right Brain	1	2.17
13	Someone serious	1	2.17	32	Voiced Guide	1	2.17
14	Grandfather	1	2.17	33	Board	1	2.17
15	Close Friend	1	2.17	34	Historian	1	2.17
16	Core of the World	1	2.17	35	Scales	1	2.17
17	An old scholar	1	2.17	36	Star	1	2.17
18	Gas lamp	1	2.17	7	Guide Voice	1	2.17
19	Мар	1	2.17	8	Time machine	1	2.17
					Total	46	100

Table 5 indicates that the students developed 38 different metaphors for the Social Studies teacher. Among these, lamp and sun metaphors were used three times; book, compass and friend metaphors were used two times; the other metaphors were used once each. Logical foundations of the metaphors produced by the students were analyzed and coded. Gifted students" metaphors about Social Studies teacher were gathered under 8 conceptual categories which are presented in Table 6.

**Table 6.**Conceptual Categories of the Metaphors about the Social Studies Teacher

Categories	Metaphors	f	%
1. Informant Social Studies Teacher	Book(2), Core of the World (1), Piñata (1), Voiced Guide (1), Microscope (1), Right Brain (1), Encyclopedia(1), Board (1), An old scholar (1), Speaking Book(1), Grandfather (1).	12	24
2. Enlightener Social Studies Teacher	Lamp (3), Sun (2), Candle (1), Star (1), Gas lamp (1), Flame (1).	9	18
3. Social Studies Teacher as a Friend	Friend (2), Baklava (1), Close Friend (1), Sun (1).	5	10
4. Social Studies Teacher as someone who prepares for life	Father (1), Mother (1), Guiding voice (1), Life teacher (1), Family (1).	5	10
5. Personality Features	Cotton (1), Scales (1), Picture (1), Neo (A Matrix character) (1), Someone serious (1), Brain (1).	6	12
6. Social Studies Teacher as a Historian	Time machine (1), An old scholar (1), Historian (1), Gas lamp (1), Ottoman Emperor (1).	5	10
7. Social Studies Teacher as a Guide	Compass (2), Curtain (1), Map (1), Guide (1).	5	10
8. Entertainer Social Studies Teacher	Friend (1), Funfair (1), Father (1).	3	6
	Total	50	100

Table 6 shows that the categories about the Social Studies teacher are gathered under Informant Social Studies Teacher, Enlightener Social Studies Teacher, Social Studies Teacher as a Friend, Social Studies teacher as someone who prepares for life, Social Studies Teacher as a Historian, Social Studies Teacher as a guide, Entertainer Social Studies teacher and Personality Features categories.

# Category 1: Informant Social Studies Teacher.

This Category consists of 11 metaphors. Frequency distribution of the metaphors that form this category include Book (2), Core of the World (1), Piñata (1), Voiced

Guide (1), Microscope (1), Right Brain (1), Encyclopedia (1), Board (1), An old scholar (1), Speaking Book(1), Grandfather (1). One of these metaphors is as follows:

"...Social Studies teacher is like a piñata because when it explodes, it gives us the sweets inside. When the Social Studies teacher appears and starts to speak, he utters all the sweet information he has..." (FS12).

# Category 2: Enlightener Social Studies Teacher.

This Category consists of 6 metaphors. Frequency distribution of the metaphors that form this category include Lamp (3), Sun (2), Candle (1), Star (1), Gas lamp (1), Flame (1). One of these metaphors is as follows:

"...Social Studies teacher is like the sun because our teacher is someone who is like daylight and who enlightens us with his light..." (MS14).

# Category 3: Social Studies Teacher as a Friend

This Category consists of 4 metaphors. Frequency distribution of the metaphors that form this category include Friend (2), Baklava (1), Close Friend (1), Sun (1). One of these metaphors is as follows:

"...Social Studies teacher is like baklava because he talks sweetly and gives us moral support" (MS3).

# Category 4: Social Studies Teacher as someone who prepares for Life.

This Category consists of 5 metaphors. Frequency distribution of the metaphors that form this category include Father (1), Mother (1), Guiding voice (1), Life teacher (1), Family (1). One of these metaphors is as follows:

"...Social studies teacher is like a mother because she raises little children who know nothing yet..." (FS9).

# Category 5: Personality Features.

This Category consists of 6 metaphors. Frequency distribution of the metaphors that form this category include Cotton (1), Scales (1), Picture (1), Neo (A Matrix character) (1), someone serious (1), Brain (1). One of these metaphors is as follows: "...Social Studies teacher is like cotton because she is calm and kind-hearted..." (FS13).

# Category 6: Social Studies Teacher as a Historian.

This Category consists of 5 metaphors. Frequency distribution of the metaphors that form this category include Time machine (1), An old scholar (1), Historian (1), Gas lamp (1), Ottoman Emperor (1). One of these metaphors is as follows:

"...Social Studies teacher is like an Ottoman Emperor because he knows a lot about the Ottoman Empire..." (MS7).

# Category 7: Social Studies Teacher as a Guide.

This Category consists of 4 metaphors. Frequency distribution of the metaphors that form this category include Compass (2), Curtain (1), Map (1), Guide (1). One of these metaphors is as follows:

"...Social Studies teacher is like a compass because he helps us to find our way and not to get lost in the Social Studies course, which is an endless map" (FS24).

#### Category 8: Entertainer Social Studies Teacher.

This Category consists of 3 metaphors. Frequency distribution of the metaphors that form this category include Friend (1), Funfair (1), Father (1). One of these metaphors is as follows:

"...Social Studies teacher is like a funfair because we have fun at the funfair. Social studies teacher teaches us with fun." "(FS15).

# Gifted Students' Metaphors about the concept of "BILSEM"

Table 7 presents findings about the metaphors produced by gifted students in relation to the concept of BILSEM. **Table 7.** 

Metaphors about the Concept of BILSEM

Item No	Metaphor	f	%	Item No	Metaphor	f	%
1	Book	4	9.09	19	Light	1	2.27
2	School	3	6.52	20	Human brain	1	2.27
3	Entertainment Venue	2	4.34	21	Camera	1	2.27
4	Funfair	2	4.34	22	Door	1	2.27
5	Lamp	2	4.34	23	View	1	2.27
6	Second home	1	2.27	24	Microscope	1	2.27
7	Family	1	2.27	25	Part of our room	1	2.27
8	Mother	1	2.27	26	Game	1	2.27
9	Fire	1	2.27	27	Teacher	1	2.27
10	Shopping mall	1	2.27	28	Leader	1	2.27
11	Computer	1	2.27	29	Private school	1	2.27
12	Science	1	2.27	30	Free world	1	2.27
13	Invention	1	2.27	31	Cake	1	2.27
14	Four-leaf clover	1	2.27	32	Picture on which eraser is used	1	2.27
15	Home	1	2.27	33	Umbrella	1	2.27
16	Museum of the past and future	1	2.27	34	Life Tree	1	2.27
17	Ship	1	2.27	35	Innovation school	1	2.27
18	Life	1	2.27	36	Talent Show	1	2.27
					Total	44	100

Table 7 indicates that the gifted students produced 44 different metaphors about the concept of BILSEM. Of all these metaphors, book was mentioned four times;

school for three times; book, entertainment place, funfair, and lamp twice; and the other metaphors were used once.

Logical foundations of the metaphors produced by the students were analyzed and coded. The metaphors developed by gifted students about BILSEM were gathered under 7 conceptual categories which are presented in Table 8.

**Table 8.**Conceptual Categories of the Metaphors about the Concept of BILSEM

Categories	Metaphors	f	%
1. BILSEM as the Source and Transmitter of Information	Book(3), School (2), Teacher (1), Shopping mall (1), Microscope (1), Second home (1), Life tree (1).	10	21.73
2. BILSEM as an Entertaining Learning Environment	Entertainment venue (2), Funfair (2), Innovation school (1), Game (1), Museum of the Past and Future (1), Book (1), Part of our room (1).	9	19.56
3. BILSEM as a Useful Learning Environment	Innovation school (1), Science (1), Discovery (1), Human Brain (1), Life (1), Fire (1), Museum of the Past and Future (1), Bulb (1), Family (1).	9	19.56
4. BILSEM as a Developing and Guiding Environment	Leader (1), Ship (1), Light (1), Door (1), Talent show (1), Picture on which eraser is used (1), School (1), Bulb (1).	8	17.39
5. BILSEM as a Reliable and Relaxing Environment	Free World (1), View (1), Mother (1), Umbrella (1), Home (1).	5	10.86
6. BILSEM as an Interdisciplinary Learning Environment	Cake (1), Camera (1), Four-leaf clover(1).	3	6.52
7. BILSEM as an Equipped Learning Environment	Private school (1), Computer (1).	2	4.34
	Total	46	100

Table 8 indicates that the metaphors about the concept of BILSEM were gathered under BILSEM as the Source and Transmitter of Information, BILSEM as an Entertaining Learning Environment, BILSEM as a Beneficial Learning Environment, BILSEM as a Developing and Guiding Environment, BILSEM as a Reliable and Relaxing Environment, BILSEM as an Interdisciplinary Learning Environment, BILSEM as an Equipped Learning Environment categories.

Category 1: BILSEM as the Source and Transmitter of Knowledge.

This category consists of 7 metaphors. Frequency distribution of the metaphors that form this category include Book (3), School (2), Teacher (1), Shopping mall (1), Microscope (1), Second home (1), Life tree (1). One of these metaphors is as follows: ".... BILSEM is like a book because one gets information if s/he reads books. BILSEM is like a book; if you go, you get information" (MS11).

# Category 2: BILSEM as an Entertaining Learning Environment

This category consists of 7 metaphors. Frequency distribution of the metaphors that form this category include Entertainment venue (2), Funfair (2), Innovation school (1), Game (1), Museum of the Past and Future (1), Book (1), Part of our room (1). One of these metaphors is as follows:

"...BILSEM is like a funfair because the vehicles in the funfair are very interesting. The courses and topics in BILSEM are very interesting, too" (FS27).

# Category 3: BILSEM as a Useful Learning Environment.

This Category consists of 4 metaphors. Frequency distribution of the metaphors that form this category include Friend (2), Baklava (1), Close Friend (1), Sun (1). One of these metaphors is as follows:

"BILSEM is like life because things students learn in BILSEM help them in their lives..." (FS19).

# Category 4: BILSEM as a Developing and Guiding Environment.

This Category consists of 8 metaphors. Frequency distribution of the metaphors that form this category include Leader (1), Ship (1), Light (1), Door (1), Talent show (1), Picture on which eraser is used (1), School (1), Bulb (1). One of these metaphors is as follows:

"...BILSEM is like a door because it is open to those who prove themselves and lead a way". (FS14).

# Category 5: BILSEM as a Reliable and Relaxing Environment.

This Category consists of 5 metaphors. Frequency distribution of the metaphors that form this category include Free World (1), View (1), Mother (1), Umbrella (1), Home (1). One of these metaphors is as follows:

"...BILSEM is like a mother because it educates us, shows us affection, treats us specially, and increases our self-confidence" (MS3).

# Category 6: BILSEM as an Interdisciplinary Learning Environment.

This Category consists of 3 metaphors. Frequency distribution of the metaphors that form this category include Cake (1), Camera (1), Four-leaf clover (1). One of these metaphors is as follows:

"...BILSEM is like a four-leaf clover because all four leaves have courses around (FS28).

# Category 7: BILSEM as an equipped Learning Environment.

This Category consists of 2 metaphors. Frequency distribution of the metaphors that form this category include Private school (1), Computer (1). One of these metaphors is as follows:

"...BILSEM is like a private school because it has everything" (MS10).

#### Discussion

Findings of the present study show that gifted students who are enrolled in BILSEM have positive attitudes towards the concepts of Social Studies course, Social Studies teacher, and BILSEM.

Gifted students participating in this study reported that Social studies course reflected real life; it was a comprehensive, informative, student-centered, and interdisciplinary course; and it guided and enlightened them. The metaphors in these categories showed that the students had positive attitudes towards Social Studies course. Gifted students perceive learning new information and skills as a process which is very exciting, happy, interesting and satisfactory (Eristi, 2012). In this regard, learning new information in the Social Studies course might have positive effects on students' attitudes towards this course. Two of the students reported that they found Social Studies course complicated. The students also emphasized the comprehensive and informative nature of this course. Social Studies courses are interdisciplinary fields which can gather fields such as anthropology, economy, literature, sociology, geography, history, archeology, and law under the same roof. With its feature that combines the other disciplines within the Social Studies discipline, it is an important component for having in-depth understanding of all disciplines, and it enables to establish interdisciplinary connections. These connections make the acquired information meaningful an thus permanent (Van Tassel-Baska and Stambaugh, 2006; as cited by Atalay, 2014). The fact that the topics in Social Studies reflect real life makes the course interesting for students. Popham (1971) state that Social Studies course programs is highly complicated and diverse, in a way to attract gifted students' interest.

According to the percentages of the conceptual categories in the study findings, the students participating in this study prioritized the real life feature of the Social Studies course. In line with this, Mertol, Doğdu and Yıllar (2013) investigated gifted students' metaphors about the Social Studies course and found that the Social Studies was an important and necessary course which could reflect various aspects of life naturally. In addition, in their study conducted with primary school students, Gömleksiz, Kan & Öner (2012) reported that students had positive metaphoric perceptions about the Social Studies course.

The metaphors produced by gifted students about their Social Studies teacher were classified under 8 categories. These categories showed that students perceived Social Studies teacher as someone who informs, who enlightens, who guides, who

entertains, who prepares for life, who is a historian, and who is friendly. Given the unique features and needs of gifted students, it is clear that teachers have a central role in these students' academic success (or failure). In this regard, Fraser-Seeto, Howard & Woodcock (2015) stated that teachers have a vital assistant role in meeting gifted and talented students' educational needs. According to Demirel (2009), effective teachers have eight features. These are enthusiasm, sincerity, reliability, possession of high academic success expectations, support, cooperation, flexibility and knowledgeableness. Effective teachers should have improved themselves in such issues as planning instructional activities, benefiting from instructional methods and techniques, establishing effective communication and classroom management, using time effectively, evaluating learning, and guiding. He asserts that to make the learning-teaching process effective, teachers should organize the learning environments considering the psychological and physical aspects together with students and choose the appropriate methods, techniques and strategies according to their students. In this regard, it seems that the gifted students participating in this study perceive their Social Studies teacher as someone who has the effective teacher features, and they have positive attitudes towards their Social Studies teacher.

An analysis of the categories that were formed from the metaphor codes about the concept of BILSEM indicated that gifted students had positive views about BILSEM. The participating students saw BILSEM mostly as a very informative environment. This category was followed by the useful and enjoyable environment category. In addition, students were found to think that BILSEM was developing and guiding, it provided an interdisciplinary learning environment, and it was an equipped place. It is important to note that none of the students developed negative metaphors about BILSEM. This finding is in line with Aslan and Dogan's study (2016). Students' positive metaphors could be associated with the facts that the institution has adequate equipment and the activities meet students' expectations. In their study conducted with 105 gifted students, Okan & İşpınar (2009) reported how gifted students acknowledged the differences between BILSEM and their school and found the learning environment in BILSEM more effective and enjoyable. They also reported that learning in smaller classes among pupils closer to their own pace at BILSEM had effects on gifted students' positive views. This study gathered gifted students' metaphors about the concept of BILSEM under 7 categories. These categories are similar to the findings reported by Satmaz (2016) and Kunt and Tortop (2013). The emphasis made by students regarding the informative and enjoyable environment provided in BILSEM is line with the findings of the studies conducted by Kunt and Tortop (2013) and Okan and İşpınar (2009). In line with the findings of the present study, Aslan and Dogan (2016) reported that students found BILSEM as a relaxing, thought-provoking, exciting, and enjoyable environment. In addition, Çelik Şahin (2014) found that students who were enrolled in BILSEM found this institution beneficial, which is in line with the findings of the present study.

Students' finding BILSEM informative, developing and guiding is parallel to the aims of BILSEMs indicated in the Regulations of Science and Arts Centers (MOne, 2016) which noted "....to become aware of their individual abilities, improve their capacity and use it at highest level". Students' finding BILSEM useful, enjoyable, reliable and relaxing is is parallel to the aims of BILSEMs indicated in the Regulations of Science and Arts Centers (MoNE 2016) which noted "...in the process of improving their talent areas, dealing with the social and emotional development areas in unity...". Students' finding BILSEM as an equipped and interdisciplinary learning environment is parallel to the aims of BILSEMs indicated in the Regulations of Science and Arts Centers (MoNE, 2016) which noted "...enabling students to gain scientific study discipline, think in an interdisciplinary way, solve problems or have projects for specific needs...". In this regard, practices in BILSEM seem to serve its purpose.

Recommendations for further studies may include investigating metaphoric perceptions of students in other courses in order to contribute to their development in better environments. In addition, BILSEM teachers' and parents' metaphoric perceptions about gifted students and BILSEM could be investigated.

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