

An Investigation of Rural Secondary School Students' School Images with Regard to Some Variables

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Abstract

The aim of this study is to determine the secondary school students' school images in their minds and to reveal whether or not these images change in terms of the gender and class level variables. The study was carried out in a village school located in the western region of Türkiye in 2018-2019 education year. The village where the study was carried is only 28 kilometres away from the city centre and it has two neighbourhoods. The reason why this school was chosen is that the researcher was working in the school as a substitute teacher at that time when the study group consisted of 83 secondary school students. In addition, there were 42 female students and 41 male students in the study group. As a result of the study, it can be stated that two categories (traditional and broader than traditional) related to the secondary school students' school images stood out. Moreover, it's revealed that students' school images didn't exhibit a considerably significant difference in terms of class level and a balanced distribution was detected in terms of gender.

Key Words

Image, School, Schoolyard, Secondary school students, Rural students

About Article

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Introduction

Education is a process which individual make contributions in terms of national, cultural, and moral values to the society where they live, and acquire sensitivity and information about knowledge, attitudes, skills, abilities, and perceptions (Ministry of National Education [MoNE], 2018). According to Fidan and Erden (1986), education is a process which prepares the individuals for the target goals and Erdem and Demirel (2002) stated that education is a way of acculturation knowingly and wilfully. According to Tezcan (1996), education is a process which makes contribution to the development of individuals' personality and enables them to gain knowledge, skills, and behaviours they will require in their maturity.

Considering these definitions, it can be stated that education is a process which generates terminal behaviour within individuals and prepares them to many areas in life such as knowledge, skills, and attitudes they will need in their future life. In this process, individuals reinforce the knowledge they have required with their experiences. Individuals' acquisition of knowledge firstly begins in the family. Subsequently continues systematically and in a planned way in schools. Individuals continue learning new things in the school by including the knowledge, skills, and abilities which they learnt in the family during the educational process (Emek, 2019).

A school has an important place in lifelong learning. The school building school has and equipment inside and outside the school have an important place in education (Şahin and Girgin Sarıdaş, 2015). In addition to the facilities of the school, as there are individuals studying in the school, their characteristics is also important. Every individual has different characteristics. One of the reasons for this condition is the environment where the individuals live (home, school, playground, social environment, school facilities, indoor and outdoor space, and etc.,) (Tandoğan, 2016; MoNE, 2018). According to another statement, it was determined that the environment where the individual lives has an effect on his behaviours and thus, they differ (Barker, 1968; Bechtel, 1977; Wicker, 1979). Within this context, it can be stated that the setting where students live has an effect on their development.

According to the Elementary Education implemented in Türkiye and Education Law, the compulsory elementary education includes individuals aged between 6 and 14. An individual has to continue four-year elementary education and four-year secondary education to complete his compulsory education (URL 1). Thus, it can be stated that individuals spend most of their time in school. There are many definitions about the definition of the school concept in literature. Bursalıoğlu (1979) describes the school as a special space. The school is a common and social organization which everyone is interested and in which the individuals acquire basic numerical skills and reading-writing, complex and abstract knowledge (Dönmez, 2001). Since the school is a social institution, this causes the school to become important due to its prevalence and functionality. The main purpose of our education system is to raise individuals who have knowledge, skills, and behaviours integrated with values and competences. School is a social space in which education and teaching are performed in a planned and programmed way by meeting the requirements (Tarhan, 2008). When the definitions about the school are examined, it can be stated that it is an organization in which the individuals' needs stand out and which meets individual's needs, and enable them to gain some skills. Thus, schools are required to be organized based on the contemporary and democratic principles and considering both individual differences and the needs of society (Başaran, 2006). The need for the arrangement of learning environments in schools has recently become a topic of discussion (Özdemir and Y1lmaz, 2008).

A school is a period of time which determines students' future. Moreover, the school is a social environment in which students' cultural and sociological values as well as beliefs are developed. While individuals spend a good part of their time in school settings, they also gain a lot of life experiences (Demir, 2007). Moreover, the school has an important part in individuals' gaining basic skills that form their cognitive, affective, psychomotor, and aesthetic feelings (Woolfolk, 2017). During this period, because individuals spend most of their time in the school, the school has an important place in their minds (Rudduck and Flutter 2004). In addition, time spent in the school shapes

students' feelings towards the school either positively or negatively (Gökdaş and Ak, 2019). It was revealed that the schoolyards designed with natural products had a positive effect on individuals' development (Tandogan, 2016). Physical space where individuals interact is important for their development. Physical space for individuals includes areas such as home, immediate surroundings near the house, school, playgrounds and etc., (Barker, 1968; Bechtel, 1977; Wicker, 1979). The places where individuals live must become places which are safer, have more playgrounds, and where individuals commune with nature (Tandogan, 2016). Some countries (The Netherlands, England, and Germany) created the streets, playgrounds, and schoolyards that are compatible with the individuals' safety and needs with structures like Woonerf' and "Home Zone".





Figure 2. Woonerf https://tr.pinterest.com/pin/335799715939898652/?lp=true

Figure 1. Home Zone <u>https://www.eltis.org/resources/photos/freiburg-home-zone-5</u>

"Home Zone" and "Woonerf" are applications which increase the physical surroundings of urban space with playgrounds, trees, and security signs for individuals. However, because it would be difficult to handle the whole city, it was particularly limited to the design of the primary schools where children spend more time and compulsory education is carried out (Malone and Tranter, 2003). In addition, the initiative started under the name "Learning through Landscapes" aims at planting trees as green spaces in existing primary schools and increasing the values given to the individuals. This initiative is an organization which not only enables active learning of the individual who connects with the nature but also aims at actualizing learning while having fun (Tandoğan, 2016).



Figure 3. Learning through Landscapes http://learningthroughlandscapes.eu/project/spring-at-our-school-garden/

Administrators and teachers determine how to design the learning environments in Türkiye. Within this context, students are not trained in their dream schools in their minds but in the schools, which are determined by the adults or which are designed within the bounds of possibility. It is considered that students who study in the school must decide the design of the school (Ghaziani, 2008) and this will lay the foundation of the concept of innovative school design because it was determined

that the students who studied in the environments compatible with their imaginations and preferences were actively engaged in the lesson and had high achievements (Bland and Sharma-Brymer, 2012). In line with this, the purpose of the study is to determine the school image in secondary school students' minds. Considering this purpose, the study sought answers to the following research questions:

- 1. What are the secondary school students' school images?
- 2. How do the secondary school students' school images change in terms of gender variable?
- 3. How do the secondary school students' school images change in terms of class levels?

Method

Case study was used in this study which adopted qualitative research design. Because case study is a research method which involves in-depth and detailed examination about the phenomenon, interprets this phenomenon within its real-life context, and provides an opportunity to study this phenomenon in a short time (Yin, 2003; Vural and Cenkseven, 2005), it is considered that it is compatible with the nature of the study.

Study Group

The study was carried out in a village secondary school located in the western region in Türkiye in 2018-2019 academic year. The village where the study was carried is only 28 kilometres away from the city centre and it has two neighbourhoods. A total of 101 students study in the village secondary school. Convenience sampling was used in the study. In this type of sampling, the researcher chooses a sampling that is easily accessible and thus the data is collected quickly and easily. The study group consisted of 83 secondary school students. The reason for this is that some students did not come to the school on the day the implementation was carried out and some of them did not complete one section of the data collection tool (drawing or explanation). The characteristics of study group was presented in Table 1.

	Class laval	Gender						
	Class level	Female	Male	Total				
Class Level	Secondary school 1 st grade	4	10	14				
	Secondary school 2 nd grade	13	13	26				
	Secondary school 3 rd grade	15	12	27				
	Secondary school 4 th grade	10	6	16				
Total		42	41	83				

Table 1. The characteristics of study group

The distribution of the students who compose the study group is as follows: 14 students in secondary school 1^{st} grade, 26 students in secondary school 2^{nd} grade, 27 students in secondary school 3^{rd} grade, and 16 students in secondary school 4^{th} grade. In addition, there are 42 female students and 41 male students in the study group. The individuals in Türkiye start compulsory education at the age of 6. They continue a four-year secondary school after a compulsory four -year primary education. As this study was carried out with secondary school students, it can be stated that the participant students' ages were in the age range of 10-13 years.

Data Collection Tool

First of all, the literature was reviewed within the context of the study. There are studies in literature which examined the students' perceptions about school (Aktürk-Çopur, 2017; Geyik, Çalıskan and Bay, 2019; Tandogan, 2016). It was observed that different methods and techniques were used as data collection tools in these studies. In addition, these studies (Geyik, Çalıskan and Bay, 2019; Tandoğan, 2016) suggested that drawing should be included in the further studies. Considering all these points, a data collection tool including drawing and explanation was developed. Data collection tool consists of two parts. There are two questions which aim at determining students' demographic characteristics (gender and class levels). The second part of the

data collection tool includes a drawing question with an instruction and three open-ended questions seeking explanations for the drawing. An opinion of an expert was consulted for the suitability of the data collection tool to the purpose of the research. Necessary corrections and changes were made, and the data collection tool was finalized.

The data collection tool was implemented by the researcher without hindering the syllabus. Students were given one course hour for the implementation and they were asked whether or not there were any points they did not understand in the data collection tool.

Data Analyses

After the implementation of the data collection tool, a rubric was developed by the researcher considering the studies in literature. According to this rubric, drawings and explanations were divided into three categories. These categories include "sensational, traditional, and broader than traditional". If a student included the elements that were not possible to encounter in the real world in his drawing and explanation and these elements were scary, bad, and utopic (flying school, castle school, and robot school and etc.), they were evaluated in sensational category. In the traditional school category, there were students who drew their own schools. The drawings and explanations evaluated in this category included a two-floor school building, concrete schoolyard, and basketball court and cafeteria in the schoolyard. In addition, it was revealed that the classrooms in the school building were designed with a traditional viewpoint, the teacher lectured, and the student was sitting at his desk and listening to the teacher. Another category included in the rubric is "broader than traditional" category. The drawings and explanations in this category included the following: there were technological classes, schoolyards were designed as learning environment, teachers taught their lessons outside the school settings, and there were different spaces in the schoolyards (sports, reading a book, playground, cinema, theatre, swimming pool, and etc.,).

Findings

Within the context of this study, the secondary school students' images about school were discussed in terms of different variables and the findings about them were presented in tables below. In addition, examples from the students' drawings and explanations were presented in the findings section. Students were coded with numbers in the examples given for the readers to follow the findings more easily. "S" stands for students and numbers represent the order in coding. The distribution of the secondary school students' school images was presented in Table 2.

1 2	e	
 School images	f	%
 Sensational	14	16.87
Traditional	35	42.17
Broader than traditional	34	40.96
Total	83	100

Table 2. Descriptive statistics results about secondary school students' school images

When Table 2 was examined, among the participant secondary school students in the study, 16,87% of them were in the sensational category, 42,17 % of them were in the traditional category, and 40,96% of them were in the broader than traditional category. According to this finding, it can be stated that secondary school students' school images were concentrated on two categories (traditional and broader than traditional).

It is seen that the drawings in the sensational category included robot school, ship school, flying school, and fish school. The explanations of these pictures included the following examples: the lesson was taught in these environments, trips were taken with these schools whenever wanted, and schools were controlled by the robots and etc.

The physical structure of the school where students study was included in the traditional category. The existence of traditional elements draw attention with the drawings and explanations in this category.

It was revealed that the students in the broader than traditional category supported their classroom environments with variety of technological tools and designed the schoolyard considering different learning domains in their drawings. The explanations in this category included broader than traditional point of view similar to the drawings. The distribution of secondary school students' school images according to the school design was presented in Table 3.

	Class Level								
School images	1 st grade		2 nd g	2 nd grade		3 rd grade		4 th grade	
	f	%	f	%	f	%	f	%	
Sensational	-	-	6	7.23	5	6.02	3	3.61	
Traditional	7	8.43	12	14.46	11	13.25	5	6.02	
Broader than traditional	7	8.43	8	9.64	11	13.25	8	9.64	
Total	14	16.87	26	31.33	27	32.53	16	19.28	

Table 3. Descriptive statistics results about school images according to the class level

When Table 3 was examined, it was seen that 16,86% of the secondary school students had sensational school image according to their class levels. Among the students with sensational school image, 6 of them are secondary school 2nd graders, 5 of them are 3rd graders in secondary school, and 3 of them are 4th graders. The illustrations evaluated in this category revealed that students drew schools like a castle, robot, fish, ship, flying school, and school in the sky. An example from student responses evaluated in this category was presented below.

S12 (Secondary school 2nd grade student):



Illustration 1: Belonging to S12

The student was evaluated in the *sensational category*. The reason why the student was evaluated in this category is that he integrated the school into a robot in his drawing. In addition, he stated in his explanation that when he wanted to go on a school trip, he could visit with the school, the school provided a successful education, it was directed by the robot, and robots replaced the teachers.

When Table 3 was examined, it was seen that 42,17% of the secondary school students had traditional school images according to their class levels. Among the students with traditional school images, 7 of them are secondary school 1st graders, 12 of them are 2nd graders in secondary school,11 of them are 3rd graders and 5 of them are 4th graders. The illustrations evaluated in this category included

a two -storey school, teacher's table, rows of desks, a flag, a basketball court in the schoolyard, and smart boards. An example from student responses evaluated in this category was presented below.

S15 (Secondary school 1st grade student):

The student was evaluated in the *traditional category*. The reason for the evaluation of the student in this category is that the student reflected the current school she was studying in her drawing. The student presented two sections in her drawing: interior and exterior of the school. In her drawing showing the exterior of the school, there is a two-floor building, a flag, a flagpole, and the name of the school.

In her drawing showing the interior of the school, she illustrated a classroom having an existing row of desks, the teacher told the lesson sitting at her table, and the students sat passively with

their coursebooks in front of them and listened to the teacher. The student in her explanations emphasized that the teacher explained the subject seriously and the students listened to the lesson quietly without disrupting the lesson.





Illustration 2. Belonging to S15 showing interior of **Illustration 3**. the school

Illsutration 3. Belonging to S15 showing exterior of the school

When Table 3 was examined, it was seen that 40,96% of the secondary school students had broader than traditional school images according to their class levels. Among the students having broader than traditional school images, 7 of them are secondary school 1st graders, 8 of them are 2nd graders in secondary school, 11 of them are 3rd graders, and 8 of them are 4th graders. The drawings and explanations evaluated in this category revealed that there were desks equipped with technology in the class and there were playfields for individual interests and recreation areas for social and cultural interests. An example from student responses evaluated in this category was presented below.

S10 (Secondary school 4th grade student):

The student was evaluated *broader than traditional category*. The reason why the student was evaluated in this category is that he included similar elements in his illustrations and explanations. The student illustrated both schoolyard and interior of the school separately. It is seen that students have a different sitting arrangement from the traditional one, the teacher and the students do experiment, and the students work collaboratively in groups. Moreover, there is a gym, library, a multi-purpose room, a cafeteria, an education-game room, and a park having a sitting area in the woodland. Student explanations are compatible with the illustrations. The illustration emphasized that different from the traditional courses, students learnt by doing experiments and with fun, teachers transferred knowledge to the students with tolerance and affection, and students learnt with fun and experience.





Illustration 4. Belonging to S10 showing interior of the school

Illustration 5. Belonging to S10 showing exterior of the school

The distribution of secondary school students' school images according to the gender variable was presented in Table 4.

Table 4.	Descriptive	statistics	results	about	secondary	school	students'	school	images	according	to t	the	gender
variable													

	Gender						
School Images	Fei	male	Male				
	f	%	f	%			
Sensational	6	7.22	8	9.63			
Traditional	18	21.68	17	20.48			
Broader than traditional	18	21.68	16	19.27			
Total	42	50.60	41	49.39			

When Table 4 was examined, among the female students, 7,22% of the them had sensational school images, 21,68 % of them were traditional, 21,68% of them had broader than traditional school images. Considering these values, it can be stated that both female and male students' school images

in their imagination were similar and these images were concentrated on traditional and broader than traditional categories. The student responses evaluated in these categories were presented below.

S45 (Female student):

The student was evaluated in the *sensational category*. It is understood from the student's illustration and explanations that she defined the school as a flying object. The student in her explanation stated that the school should fly whenever it wanted and thus the teacher should keep an eye on everywhere in the school.



Illustration 6. Belonging to S45

S51 (Male student):

The student was evaluated in the traditional category. The reason why the student was evaluated in this category was that the student reflected the current school where he was studying in his illustration. The student divided his illustration into two including interior and exterior of the school. In his illustration showing the exterior of the school, there is a two-floor building and a flag and a flagpole. In his illustration showing the interior of the school, he drew a class including a traditional row of desks, the teacher is standing and teaching in the middle of the class using the smartboard, and the students are sitting passively listening to the lesson. In his explanations, he emphasized that the teacher had the students watch a video on the smartboard and the students watched the video passively.

S8 (Female student):

The student was evaluated in the broader than traditional category. The reason for her evaluation in this category was that she included similar elements both in her illustration and explanation. The student in her illustration divided the schoolyard into different sections which we cannot see in the daily life (cinema-theatre room running track -tennis court-wrestling ring-table tennis area). In her explanation, she stated that although the interior of the school was designed classically, the schoolyard must be designed to do different sports activities. In addition, she emphasized that the teacher must not do his job to teach a lesson and earn money and determined that the teacher must be a teacher who takes care of the children and entertains while teaching. In addition, it was emphasized in her explanation that the student was satisfied with her life, cheerful, happy, successful, and was at peace with life.



Illustration 7. Showing exterior and interior of the school belonging to S51



Illustration 8. Belonging to S8

Discussion, Conclusion and Suggestions

In this study which explored the secondary school students' school images in their imagination, school images were discussed in three categories: sensational, traditional, and broader than traditional. Analysing the students' categories about the school images, it can be stated that it concentrated on two categories (traditional, and broader than traditional) (Table 2). Considering the whole sampling, it was revealed that the number of students evaluated in the traditional and broader

than traditional categories was very close. It was observed that while the students in traditional category were drawing their dream schools, they drew nearly the same school building, desks, teacher, school vard, and even the location of the flags. The 2005 curriculum aimed at having learning environments with student-centred education (MoNE, 2005). However, the students are still drawing the school settings and learning environments with a traditional philosophy in 2019 and thus, it is considered that this is a significant result in terms of both 2005 and 2013 curricula. Yet, the number of more traditional drawings in students' illustrations emerged as an unexpected result. On the other hand, it was seen in the drawings of the students who were evaluated in the broader than traditional category that they illustrated the movement areas in the schoolyard more broadly. Likewise, there are many studies concluding that schoolyards should be designed to allow students to be able to move more freely (Malone and Tranter, 2003; Marcus and Francis, 1998). Algan and Uslu (2009) in their study included similar elements and emphasized that in addition to educational activities, it was important to redesign the primary education schoolyards so that they would provide opportunities to carry out socio-cultural activities, game and sports activities and all major activities including ceremonies and celebrations.

The second result obtained from the study was that the secondary school students' school images did not reveal a significant difference in terms of class levels (Table 3). It was determined that the students in the sensational and traditional categories were mainly in the secondary school 2^{nd} and 3^{rd} grades and the students included in the broader than traditional category were predominantly in the 3^{rd} grade of secondary school. Because none of the 1^{st} graders in secondary school were evaluated in sensation category, it was interpreted that they imagined more realistic learning environments. On the other hand, it was determined that secondary school 1^{st} grade students were mainly included in traditional categories, the 2^{nd} graders of secondary school were included in traditional category, secondary school 3rd grade students were mainly included in traditional and broader than traditional categories, and the 4^{th} graders of secondary school were predominantly included in traditional categories, and the 4^{th} graders of secondary school were predominantly included in traditional categories.

Considering the final result of the study, it can be stated that the secondary school students' school images in terms of gender showed a balanced distribution (Table 4). In other words, this result can be interpreted in this way: gender variable was not effective in the distribution of school images. When both female and male students were evaluated within themselves, it was determined that they were predominantly included in the traditional and broader than traditional categories.

When the study results are evaluated in general, sensational category has the lowest frequency in terms of all class levels and gender variable. It can be deduced that students concentrated on illustrations based on logical planning during their drawings. As a result of the study, the illustrations included in the traditional category reveal that schools have two-floor buildings, the schoolyards are concrete, there is only a basketball court there as well as the flagpole. Similarly, traditional illustrations included in the elements in the interior of the school stood out among these drawings in this category and desks, teacher's table, and whiteboard are present in the traditional class setting. Students stated with their explanations in this category that the teacher taught the lesson actively, but the students sat passively and listened to the lesson. The reasons for this situation can be interpreted that students were under the influence of the learning settings in which they studied until that time.

When the illustrations and explanations included in the broader than traditional category were examined, it was seen that there were more sports areas (wrestling-tennis-volleyball-basketball-football pitch and etc.), swimming pool, cinema, theatre, study room, and dining hall, and so on. Likewise, it was revealed in the literature that while students explained their dream schools, they were expected to describe the classrooms equipped with technology; however, students described clean, large, and green schoolyards (Gökdas and Ak, 2019; Frost and Holden, 2008). A similar situation was also revealed by the studies carried out by Kostenius (2011) and Tandoğan (2014). According to Kostenius (2011), students dreamt of schools where there were entertaining learning environments, areas which would provide opportunities for physical activities, and large schoolyards where they can feel the peace of the nature and there are lots of trees and plants. Tandoğan (2014) asserted that students needed wide open spaces where they can play dodgeball and hide and seek as well as do

different types of sports and thus, cities should be planned in the light of this information. In addition, Hauser (2002) stated that schoolyards were supposed to offer experiences to the students in different areas (movement, relaxation, sports, doing observation and etc.,).

School settings have an important effect on children's social, physical, and affective skills (Özdemir and Yilmaz, 2008). In this regard, it is considered important that the schools where students spend most of their time (Bakır Ağyar and Kaya, 2017) should be as in their imagination or meet their expectation.

Thus, while designing the schoolyards, student opinions and suggestions should be included as well as other shareholders. At this point, it is suggested that especially schoolyards should be designed to carry out education-teaching activities in addition to the activities such as ceremonies-celebrations. Similarly, it is recommended to design spaces for different age groups or to arrange these areas to serve for different structures during the design of the schoolyards. Moreover, it was found in this study that there were illegible writings in the students' explanations and incomprehensible illustrations with students' responses. Thus, it is suggested for the future studies that in addition to drawing method, interview method should be used to help students mention the points they want to tell in their drawings.

References

- Aktürk Çopur, D. (2017). Imaginable school perception of students. International Journal of Leadership Training, 1(1), 1-8.
- Algan, H. &Uslu, C. (2009). Designing primary schoolyards with the stakeholder participation: Adana Sample. *Mediterranean Agricultural Sciences*, 22(2), 129-140.
- Bakır Ayğar, B. &. Kaya, A. (2017). The mediator role of school climate on the relationship between middle school students' sense of school membership and their school loneliness. *E-International Journal of Educational Research*, 8(1), 14-27.

Barker, R. (1968). Ecological psyhology. Stanford: Stanford University Press.

- Başaran, İ. E. (2006). Türk eğitim sistemi ve okul yönetimi [Turkish Education System and management]. Ekinoks Publishing.
- Bechtel, R. B. (1977). Enclosing behaviour. Dowden-Hutchinson and Ross, Stroudsburg, PA.
- Bland, D., & Sharma-Brymer, V. (2012). Imagination in school children's choice of their learning environment: An Australian Study. *International Journal of Educational Research*, 56, 75-88.
- Bursalioglu, Z. (1979). Okul yönetiminde yeni yapı ve davranış [New structure and behavior in school management]. (5th Edition). Ankara University Faculty of Education Publishing.
- Demir, C. E. (2007). Metaphors as a reflection of middle school students' perception of school: A cross cultural analysis. *Educational Research and Evaluation*, 13(2), 89-107.
- Dönmez, B (2001). School security problem and the role of the school administrator. *Educational* Administration: Theory and Practice, 7(1), 63-74.
- Emek, E. (2019). Primary school teachers' view on the use of garden based learning in science. *Unpublished Master Thesis*. Education Sciences Institue: Nigde Ömer Halisdemir University, Niğde.
- Erdem, E. & Demirel, Ö. (2002). Constructivism in curriculum development. *Hacettepe University Journal of Education*, 23(23) 81-87.
- Fidan, N. and Erden, M. (1986). Eğitim bilimine giriş. Kadıoğlu Publishing.
- Frost, R., & Holden, G. (2008), Student voice and future schools: building partnerships for student participation, *Improving Schools*, 11(1), 83-95.
- Geyik, Ş., Çalışkan, Y. M., & Bay, D. N. (2019). Identifying the school perception of preschool children. *Ihlara Journal of Educational Research*, 4(1), 1-17.

Ghaziani, R. (2008). Children's voices: raised issues for school design. Co-Design, 4(4), 225-236.

Gökdaş, İ. and Ak, Ş. (2019). The dreams of elementary school students in terms of the schools of the future. *Kastamonu Education Journal*, 27(5), 2161-2172.

- Hauser, L. (2002). *Kindergerechtes und naturnahes schulgelände als erlebnisraum*. Zürich: Praktikumsbericht Paedagogisches Hochschule, retrieved from http://www.phzh.ch/ webautor-data /dokus /bericht_ lukas_ hauser_154228. pdf.
- Homezone (2017). Retrieved May 15, 2020 from <u>http://www.metamorphosis-project.eu/multimedia/photo/home-zone-freiburg-0</u>.
- Kostenius, C. (2011). Picture this-our dream school! Swedish schoolchildren sharing their visions of school, *Childhood*, 18(4), 509-525.
- Learning through Landscapes (2019). 15 Mayıs 2020 tarihinde http://learningthroughlandscapes.eu/project/spring-at-our-school-garden/ adresinden erişilmiştir.
- Malone, K., & Tranter, P. (2003). Children's environmental learning and the use, design and management of schoolgrounds, *Children, Youth and Environments, 13*(2). 87-137.
- Marcus, C.C. & Francis, C. (1998). *People places: Design guidelines for urban open space, child care outdoor spaces*, Canada & USA: John Wiley & Sons.inc.
- Ministry of National Education [MoNE] (2005). Science and technology course (4th and 5th grades) curriculum]. Ministry of National Education Board of Education and Training Secondary science curriculum, Ankara.
- Ministry of National Education [MoNE] (2018). Science course (elementary and middle school 3, 4, 5, 6, 7 ve 8. grades) curriculum. Ministry of National Education Board of Education and Training, Ankara.
- Özdemir, A., & Yılmaz, O. (2008) Assessment of Outdoor School Environments and Physical Activity in Ankara's Primary Schools, *Journal of Environmental Psychology*, 28(3), 287-300.
- Rudduck, J. & Flutter, J. (2004) How to Improve Your School. London: Continuum.
- Şahin Ç. & Girgin Saridaş, D. (2015). A metaphor study: The perceptions of class teachers towards to design of future learning environments by their 21st century skills. İn Norley K. İçbay M.A. Arslan H., (Eds.), Contemporary Approaches in Education. Cambridge Scholars Publishing.
- Tandoğan, T. (2014). More livable urban space for children: practices around the world, Megaron, 9(1), 19-33.
- Tandoğan, T. (2016). More livable school grounds for children, Megaron, 1(4), 629-637.
- Tarhan, S. (2008). The effective school perception of teachers who work in primary schools. *Unpublished Master Thesis.* Social Sciences Institue: Beykent University.
- Tezcan, M. (1996). Eğitim sosyolojisi. Pegem A Publishing.
- URL 1, Retrieved May 15, 2020 from https://www.mevzuat.gov.tr/MevzuatMetin/1.4.222.pdf.
- Vural, R. A. & Cenkseven F. (2005). Case studies in educational research: definition, types, stages and reporting of case study research. Süleyman Demirel University journal of Burdur Education Faculty, 6(10), 126-139.
- Wicker, A. W. (1979) An introduction to ecological psychology, Wadsworth Inc.
- Woolfolk, A. (2017). Educational psychology (Thirteenth, Issue December). Pearson Education, Inc.
- Woonerf
 (2010).
 Retrieved
 May
 15,
 2020
 from

 https://volumeone.org/articles/2010/01/28/1148_Our_Very_Own_Woonerf
 Very_Own_Woonerf
 Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). Thousand Oaks, CA: Sage.

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