



Investigation of Students' Perceptions of Out-of-School Learning Environments Through Drawing Pictures

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Abstract

In recent years, out-of-school learning has become more and more important, thus creating new learning environments for students. Out-of-school learning enables students to discover new information both by having fun and by experiencing. The purpose of this research study was to investigate the perceptions of secondary school students about out-of-school learning environments through the pictures they drew. The research design was carried out as an art-based phenomenological approach. The study group of the research consisted of 22 eighth grade students. The data of the research were obtained simultaneously with two open-ended questions for the phenomenological design side and with the pictures drawn by the students for the art-based research side. The data were analyzed by utilizing a content analysis method. Results indicated that students mostly expressed their out-of-school learning environments as courses, home, and internet. When drawing out-of-school learning environments, students drew more "course, study room, internet, television and home" figures. Students stated their favorite learning environments as home, internet, and course. Students stated the reasons for their favorite learning environments as they are more peaceful at home, the first learning begins in the family, they can access everything more easily with the internet, and the course helps the school. It is noteworthy that students do not give examples of museums, science centers and planetariums as learning. According to the results of the research, it was determined that the students generally gave examples from their own environment as an out-of-school environment, and it was determined that they did not experience environments such as museums, planetariums,





zoos, or science centers. Since students' perceptions of out-of-school learning environments were very low, it can be suggested to teachers to plan activities and activities for them to teach in out-of-school learning environments.

[This paper was published in: "EJER Congress 2023 International Eurasian Educational Research Congress Conference Proceedings," Ani Publishing, 2023, pp. 38-58]

Keywords: Out-of-school learning environment, drawing pictures, art-based phenomenological approach, secondary school students

Introduction

Today, teachers use many teaching methods and techniques (web 2.0, collaborative learning, scenario-based, project and problem-based, etc.) in their lessons. However, it is noteworthy that out-of-school learning is on the agenda in the renewed curricula because it is both exploratory and intriguing. Out-of-school learning environments minimize students' limitations and provide students with the opportunity to experience current information in a free and freeway.

Out-of-school learning

Out-of-school learning is a type of learning that enables students to explore events and situations in daily life and in the natural environment. Teachers know that students can access much information by using their observation skills in out-of-school environments. Especially when it comes to science lessons, teachers actively use out-of-school learning environments (zoo, botanical garden, science center, etc.) to reinforce students' knowledge (Şimşek & Kaymakçı, 2015; Laçin Şimşek, 2011). All out-of-school learning environments help teachers throughout the science lesson. Out-of-school learning environments increase students' interest in the course and change their achievement in a positive way in proportion to their interest.

Learning is a process in which an individual's experiences and knowledge support and complement each other. Learning is divided into formal and informal learning. Formal learning is the correct delivery of the specified achievements and objectives to the student within a certain period of education. Formal learning is conducted in a planned and programmed manner. Certain feedback is expected from students in line with the given objectives. Informal learning takes place in life. Every situation, every event, and every person with whom the individual interacts includes informal education (Şimşek & Kaymakçı, 2015; Laçin Şimşek, 2011). This type of learning is related to the individual's adaptation to the environment and its surroundings. In this context, all the experiences and interactions that an individual has outside





of school include informal learning by covering all the environments in which they are present. Informal learning also includes out-of-school learning. The characteristics of out-of-school learning are listed as follows (Şimşek & Kaymakçı, 2015; Laçin Şimşek, 2011):

- Out-of-school learning covers all areas outside the school building/classroom.
- Out-of-school learning should provide students with the right outcomes and objectives within the curriculum.
- Out-of-school learning should support individual learning.
- Out-of-school learning eliminates the teacher-student hierarchy.

Informal learning includes all learning areas that take place outside the school and classroom. Especially in science and social sciences courses, out-of-school learning environments are utilized. In out-of-school learning environments, learning is based on interests and needs, free, dynamic, and voluntary. Out-of-school learning environments can be beneficial for students if they accurately convey the objectives and outcomes of a course to students. Out-of-school learning environments (museums, zoos, picnics, etc.) are places that students define as leisure or entertainment environments. With the innovative approaches of teachers and educators, out-of-school learning environments are being developed not only as entertainment but also as learning environments (Laçin Şimşek, 2011). Out-of-school learning environments, which reveal current information about the achievement and objectives of the course, are not just a place where students have a suitable time with their friends. Thanks to the planned and programmed lessons conducted by teachers in out-of-school learning environments, students' time in these environments is not idle.

In the literature, there are studies on out-of-school learning environments (Yıldız, 2022; Kubat, 2018; İnce & Akcanca, 2021; Erten & Taşçi, 2016; Mertoğlu, 2019; Gürbey, Efe, & Mertoğlu, 2020; Bakioğlu & Karamustafaoğlu, 2020; Karbeyaz & Kurt, 2020; Arabacı & Dönel Akgül, 2020) and picture analysis (Sapsağlam, 2017; Yalçın & Karoğlu, 2023; Yüksel, Canel, Mutlu, Yılmaz, & Çap, 2015). However, when the literature is examined, there is no study in which picture analysis and out-of-school learning environments are included together. For this reason, the question of our research was determined as "what are the perceptions of middle school students about out-of-school learning environments?".





Method

Research design

The research design was conducted as an art-based phenomenological approach. The phenomenological research design requires the researcher to bracket a priori assumptions that the researcher has about the experience or phenomenon. In other words, researchers use phenomenological research to understand the universal nature of a phenomenon by exploring the views of those who experience it (Ho, & Limpaecher, 2022). Arts-based methodology is defined as the systematic use of the artistic process, the actual making of artistic expressions in all different forms of art. Unlike studies written in academic disciplines that involve traditional scientific, verbal or mathematical definitions, arts-based research is work in which art plays an important role. Drawing a picture in response to a research question can differentiate and enrich the research, unlike narrative data. The use of painting, photography, caricature, dance and poetry in arts-based research enriches and develops the researcher (Knowles, & Cole, 2007). According to Macaroğlu Akgül (2021), the art-based approach can also be associated with the constructivist approach in which the individual constructs knowledge through life experiences and Gardner's theory of multiple intelligences.

Research group and data analysis

The study group consisted of 22 eighth grade students. Content analysis was used to analyze the data. MAXQDA was used to determine codes and themes in the analysis of the data. The answers to the two questions in the data were coded by the researchers through specific themes.

Analyzing the pictures

Each picture contains the message or emotion that the individual wants to express. There are no right or wrong answers for individuals in the pictures. Picture analysis involves having knowledge about picture tests, not making limitations to understand the pictures of individuals, being open to all contradictions, all innovations and learning during the analysis, and being able to associate the picture with the desired information. During picture analysis, the first important aspect for researchers is what the picture means to them at first glance. The second aspect aims to look at the picture objectively and unbiasedly. Looking objectively and unbiasedly includes the use of lines, page layout, the placement of objects on the page and the





use of erasers (Laçin Şimşek, 2011). As a third and final step, the picture analysis should be completed by integrating the two different analyses.

Implementation of the research

In this study, two open-ended questions, "What are out-of-school learning environments?" and "What is your favorite out-of-school learning environment and why?" were written on A4 paper and the students were expected to answer them. Then, for the art-based research part, students were given a blank sheet of paper and asked, "what comes to your mind when you think of an out-of-school learning environment, can you draw it?". Students were given 40 minutes in total for drawing and questions. In this process, which progressed under the control of the researcher, students were comfortable and free. The type of color or pencil used by the students was not restricted. The questions were given to the students simultaneously. Students were given one class hour (40 minutes) to answer the questions.

Findings

In this section, the findings related to the research question of the study, "What are the perceptions of secondary school students about out-of-school learning environments?" are listed below.

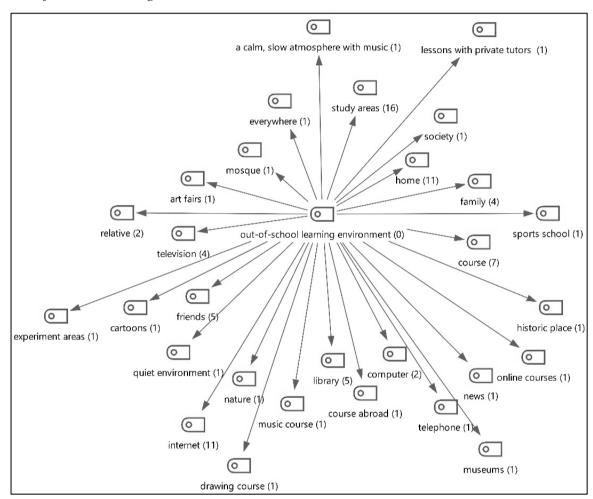




"Out-of-school learning environment" code system

Figure 1.

Out-of-school learning environment



As can be seen in Figure 1, middle school students mostly mentioned the following out-of-school learning environments: study areas (16), home (11), internet (11), courses (7), friends (5), library (5), and family (4).

Some students' answers are given below as examples:

P7: Course and study areas, nature and internet environments

P13: There is more than one environment, there is a learning environment in the classroom, outside with friends, in computer games, in movies. And even when two strangers are fighting outside, I take the mistake made by the guilty person as a lesson for myself.





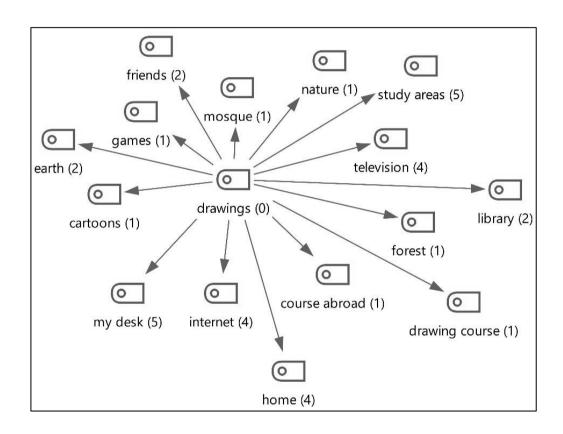
P15: Games, cartoons, reading areas, experiment areas, art fairs.

P3: Moral rules in the family environment, courtesy rules in society, historical environments, or museums suitable for human structure and environmental conditions, new unknown things such as telephone, computer, etc., news, information about the course of the world.

"Out of school learning environments in pictures" code system

Figure 2.

Out-of-school learning environments in student drawings



Secondary school students mostly indicated out-of-school learning environments as study areas (5), my desk (5), television (4), internet (4), and home (4) in their drawings.

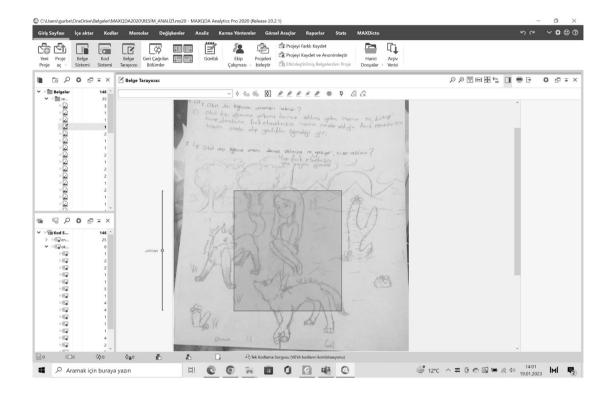
Some students' drawings are given below:





Figure 3.

P4 drawing



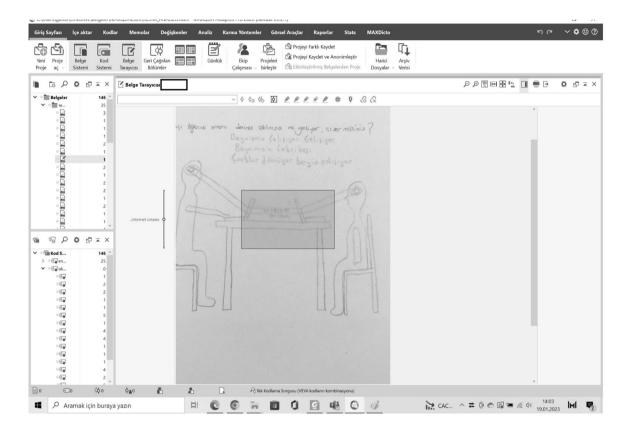
As seen in Figure 3, the student associated the out-of-school learning environment with nature and the forest, and also stated "learning new things regardless of location".





Figure 4.

P7 drawing

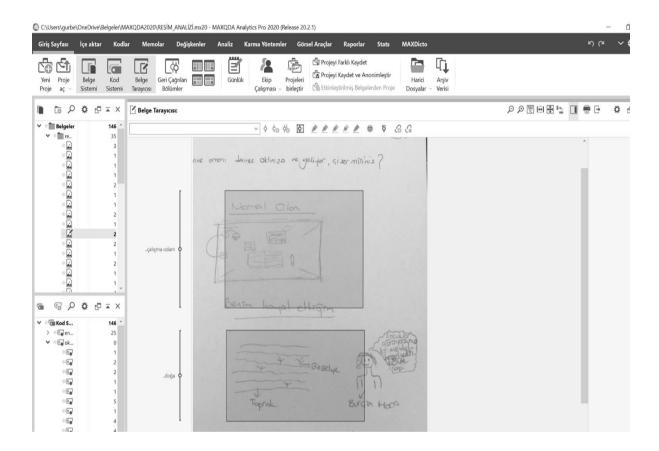






In Figure 4, the student associated the out-of-school learning environment with the internet environment, and stated that the brain works by spinning wheels in our brain.

Figure 5. *P10 drawing*



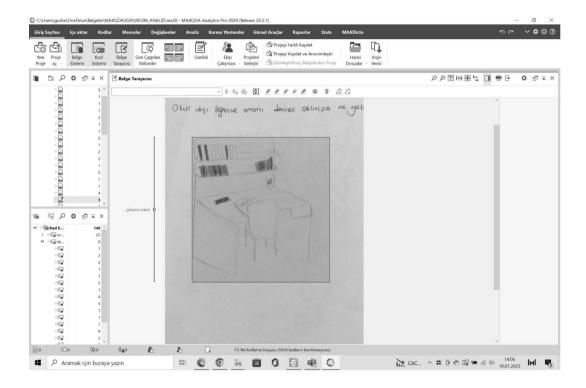
In Figure 5, the student referred to the classroom in the school as the normal environment and the out-of-school environment as the imagined environment. As can be understood from the picture, the student defined the out-of-school environment as a classroom that should be in reality. However, according to the conditions, he stated that he sees the out-of-school environment as a dream.





Figure 6.

P17 drawing



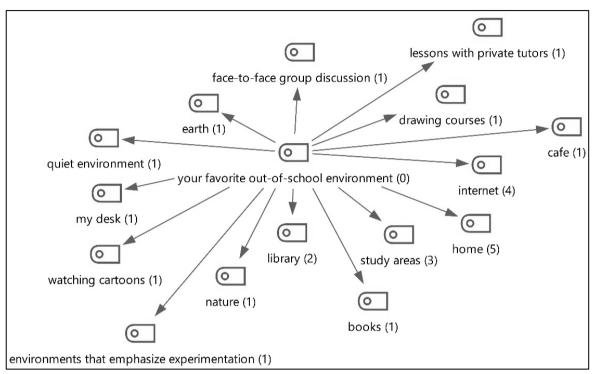
In Figure 6, the student associates the out-of-school learning environment with his desk and books.

"Favorite out-of-school learning environment" code system





Figure 7.Students' favorite out-of-school environments



Students' favorite out-of-school environments were home (5), internet (4), and study areas (3).





Table 1.Students' favorite out-of-school environment and reasons.

Your favorite out-of-school environment	Why?
Earth	P20: The world because it contains everything.
My desk	P17: Because there are a lot of reference books there, a lot of research books, a lot of information is there. After I sit at my desk, for some reason I have a lot of fun, I talk to myself, I fight with questions, I argue with the characters while reading a book. If I did these things in another place, everyone would look at me differently, so I do these things when I sit at my desk. So I can move comfortably there. I think a comfortable environment is the best learning environment.
Face-to-face group discussion	P16: Because when you discuss in groups, it's fun and it's fun and the others learn what one person knows and what is important, but the problem is that when someone gives wrong information, it spreads to many people, like a virus.
Watching cartoons	P15: Because at the <u>end of each episode of the cartoons I watch, I either learn something or learn a lesson</u> . Also, watching cartoons is <u>both fun and educational</u> .
Quite place	P14: <u>Doing the lesson by listening to music when I am alone</u> in a quiet environment because the type of song I listen to is really motivating and makes me feel happy.
Library	P9: <u>Because there are books in the closet we want, we can choose the book and learn the information immediately</u> . I also like the environment of friends, 2 or 3 of us come together and prepare exams for each other, we evaluate the questions we cannot do, my friend knows the questions I do not know and I learn them.
	P10: I think that even if it is not yet provided, having a library full of books, doing things that will make you love learning and not feeling under any pressure, I couldn't name it (it could be a relaxing library)





Study areas

P8: And studying in the classroom and being able to communicate with the teachers makes my knowledge more permanent, it is easier to learn something from a teacher and apply it.

P12: Because we have a lot of fun in the classroom and our teachers explain the lesson very well. And when we don't understand, they explain, but when we don't understand at school, the teachers don't explain, and we students don't ask because we know they won't explain. But the teachers are also right in a way, there are around 40-45 students in the school, so what can the teachers do if everyone says I don't understand, but I think the classroom is much better, I am very happy to go to the classroom.

P22: To go to school prepared before class and also to get a quality education

İnternet

P7: because unlike other learning environments, the internet has no borders. It is possible to access millions or even billions of content online. You can produce a lot of content on the internet or you can benefit from the content you want. Therefore, I find the internet environment very educational and I use it effectively.

P8: <u>There is more information on the internet than I want.</u> I can access everything I want through the internet and I can also learn general culture.

P13: Because of the technological environment, they can have fun and get information at the same time. Anyway, human beings spend better time by having fun, and they understand better what they are having fun even without realizing it. For example, someone who does not like to study learns better in a technological environment, but when his/her parents see the child, they get angry and say "why don't you study?" and take him/her to the class and force him/her to study. That child cannot understand because they are forced to do something they do not like and sometimes they fall behind.

P18: Because on the internet, we can easily access and learn about school, life, social life, whatever we want on the internet.

Home

P6: Some moral rules and traditions from my parents, information from the classroom that supports the school curriculum, news and events from my computer, thoughts, myths, stories, facts from my books, poems and biographies from magazines that fog up my head. I learn many things in my daily life. But most of this happens at home. Home is where I get the most comfortable and





	comprehensive education.
	P11: <u>Because we can take tests and review subjects at home</u> , we can repeat what we do at school and solve tests at home.
	P19: <u>Because I learn as much from my parents as I learn at school (in terms of behavior)</u> In fact, in many things in our lives, we exhibit the things we experience and learn at home.
	P21: Because I live in that environment, I feel more comfortable. When I ask a question to someone from my family, I can ask 4-5 times even if I don't understand the answer, I can ask every question. P22: The family is the place where education begins, and if the child grows up well, he/she becomes a good individual and influences the society. It also affects the country positively.
Drawing course	P5: Painting courses are best in places like Paris and France because they are important in Paris and France. I want to take painting classes the most, I want to improve my painting and I want to be able to draw very realistically like famous painters.
Cafe	P4: Because in such places, I like to sit at a table with my friends and sip hot chocolate and I like to study in a relaxed way and I like to consult with my friends about some issues. I like to sip my hot chocolate slowly and refresh my brain.
Lessons with private tutors	P1: <u>because I think it is more efficient.</u>

When Table 1 is examined, the student characterized the world as an out-of-school environment and gave the following explanation: "it contains everything". It was determined that the student, who specified the out-of-school environment as his/her desk, did not experience any other environment, obtained information from his/her books, and felt comfortable. It is understood that the student did not feel comfortable and free at school. The student who gave the library as an example as an out-of-school learning environment accesses information without a teacher and considers it important to study with friends. The students who gave the example of the study areas stated that they received help from the study areas' teachers. It is also noteworthy that they felt





comfortable asking questions to their teachers. According to the students who gave the example of the internet environment, the features of the internet such as unlimited, entertaining, instructive, and containing more information than desired are seen as useful by them. Students who gave the example of home as an out-of-school learning environment clearly stated that they were comfortable at home, that they learned certain behaviors from their parents and that the family environment was the first place where education started.

Discussion

The aim of this study is to examine middle school students' perceptions of out-of-school environments through their drawings. The results of the study and the related discussion are given below.

In a study conducted in the literature, Bostan Sarıoğlan and Küçüközer (2017) found that preservice teachers commonly see areas such as home, friends, study areas, and study centers as out-of-school learning environments. In addition, in a study conducted by Şeker and Savaş (2023), preschool teachers stated out-of-school learning environments as library, museum and zoo. In a study conducted by Acar (2014), children stated out-of-school learning environments as environments where they can play games and feel most comfortable. In addition, in a study by Bakioğlu and Karamustafaoğlu (2020), according to the statements of the students, it was determined that out-of-school learning environments increase the interaction within and between groups and realize learning by providing sociability among students.

Unlike the results of our study, in a study conducted by Ay et al. (2015), pre-service teachers stated out-of-school learning environments as science centers, natural habitats, museums, and zoos.

Conclusion

According to the results of the study, middle school students mostly indicated out-of-school learning environments as study areas (16), home (11), internet (11), course (7), friends (5), library (5), family (4). Secondary school students mostly indicated out-of-school learning environments as study areas (5), my desk (5), television (4), internet (4), home (4) in their drawings. According to the students, they justified out-of-school learning environments as "the environment where they feel most comfortable", "the environment where they are with their friends", "the place where they





can get what they want from the internet", "the information they receive in the family environment". In a study conducted by Bostan Sarioğlan and Küçüközer (2017), it was determined that pre-service teachers commonly see areas such as home, friends, study areas, study centers as out-of-school learning environments. In addition, in a study conducted by Şeker and Savaş (2023), preschool teachers stated out-of-school learning environments as library, museum and zoo. These results are like the results of our study. The fact that the participants were eighth grade students and that they were going to participate in LGS may have shaped their perceptions about out-of-school learning environments differently. For students in this age group, home, study areas or study centers are out-of-school learning environments for studying. Eighth grade students' out-of-school trips may only consist of high school promotion trips due to the exam. The fact that only one respondent answered this question with museums and historical places supports this interpretation. It is thought that students perceive out-of-school learning environments as environments where they can only study.

Unlike the results of our study, in a study conducted by Ay et al. Demir (2015), pre-service teachers stated out-of-school learning environments as science centers, natural habitats, museums, and zoos.

In a study conducted in the literature, Acar (2014) stated that out-of-school learning environments are the environments where children can play games and feel most comfortable. In addition, in a study by Bakioğlu and Karamustafaoğlu (2020), according to the statements of the students, it was determined that out-of-school learning environments increase the interaction within and between groups and realize learning by providing sociability among students. These results are in line with our research. In the qualitative questions, students defined out-of-school environments as places where they felt comfortable, where face-to-face discussions were held and where information was exchanged with friends at the café. Naturally, students' learning would be facilitated in such environments. This situation coincides with the preparation of 8th grade students for the LGS exam. The general level of arousal found in the factors related to the learner (student) in learning psychology is consistent with the concept of "the most comfortable environment" in the research. The general level of arousal, which is desired to be at the optimum level, facilitates learning and ensures that learning is permanent. In addition, peer learning is a form of learning that is encouraged not only for out-of-school learning environments but also for all courses and all





environments. In general, when it comes to out-of-school learning environments, students may have eliminated the concepts of teacher and classroom and may have characterized the exchange of information with the friends they see as the closest to them and with whom they feel most comfortable as the most effective learning. However, in this sense, out-of-school learning environments can also positively increase socialization among students, which is expected and desired among students.

Recommendations

This study reveals middle school students' perceptions of out-of-school learning environments through their drawings. An art-based research model was applied. Different subject areas (STEM, revealing misconceptions, Web 2.0 tools, alternative assessment and evaluation tools, environmental awareness, socio-scientific issues...) can be carried out with the same art-based research model. This study was conducted with middle school students, the same subject area can be similarly conducted with secondary school and preschool students. 8th grade students' perceptions of out-of-school learning environments did not include important out-of-school learning environments such as science centers, planetariums, and museums. Based on this research, it may be recommended to teachers that especially exam group students experience these out-of-school environments for motivational purposes.

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