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RESEARCH ARTICLE

Teacher Opinions on Out-Of-Class Learning Activities Based on 21st Century Skills in Pre-School Period

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ABSTRACT

21st century skills are among the most important topics of education DEBATES today. The skills expected from individuals are stated as learning and renewal skills, career and life skills, and information and media technology skills. The acquisition of these skills by students in the pre-school period is an issue that is frequently emphasized. Educational activities outside as well as inside the classroom should be organized within the framework of 21st century skills. The purpose of this study is to determine the contribution of the activities carried out in out-of-class learning environments in the preschool period to the 21st century skills of children. In this context, the research was carried out in the phenomenology pattern, which is one of the qualitative research methods, and the opinions of the teachers were consulted. Participants consist of 97 pre-school teachers working in kindergartens affiliated to the TRNC Ministry of National Education. The semi-structured interview form prepared by the researchers was used as a data collection tool. The data obtained from the interviews were subjected to content analysis. According to the findings, the following were determined: the frequency of using out-of-school learning environments in the pre-school education process is inadequate, the out-of-class activities are mostly game-based and environment-related, whereas learning, renewal, information media technology skills, which are among the 21st century skills, are not included, and observation and question-answer methods are used in the assessment process in out-of-class activities. In this study, it was concluded that the out-of-class education process is not adequate to support 21st century skills. In the light of these findings, it is recommended that teachers should carry out activities that will develop skills that are incomplete, and that the relevant activities should be implemented by teachers after they are developed through experimentation.

INTRODUCTION

Pre-school period, with its critical importance in the life of children, is also a stage when they are most open to research and learning, and considerable progress is observed in their development (Karabiber, 2016). Preschool education period. It is a period when children experience the most important learning experiences in the schooling world (Sukani & Karim, 2018). The foundation of

many skills and behaviors is laid in the preschool period. In this critical period where all development areas are supported together with the personality of the child, the basis of lifelong learning is formed. The developmental characteristics acquired by the child in the pre-school period leave a trace in his/her future life (Sapasağlam, 2017). In this regard, the experiences and learning environments in pre-school education must be suitable for today and the development of 21 century skills (Elçi, 2021).

The skills needed to keep up with the changing and developing world, to follow innovations and to adapt to changes have been questioned, and various practices have been applied from past to present for transformation. Beers (2011) refers to these practices as 21st century skills (Anagün et al. 2016). One of the most important points emphasized regarding 21st century skills is that it is not only focused on knowledge and skills, but also on understanding and performance (Dede, 2010). One of the most important concepts in the 21st century, where digital transformation is experienced, has been "education". One of the main aims of the concept of education is to enable individuals to access information instead of merely conveying it (Children's Universities in Europe and Turkey Report, 2015). In today's world where rapid changes are taking place in every field, preschool children. The skills defined as 21st century come first among the skills that are aimed to be acquired by starting. The effectiveness of teachers plays a big role in helping children acquire these skills. Especially children need to be patient. It should be ensured that learning skills such as communication and collaboration, problem solving and critical thinking, varatiolic and venicularity are supported by teachers (Kerdtbawom & Chaichomchuen, 2021).

OECD (2018) draws attention to the importance of education offered at schools. Although different skill classifications have been made for 21st century individuals to learn, the common purpose of acquiring these skills is to prepare for the future. Individuals, who are part of the society, need to have certain competencies in order to keep up with the requirements of the changing era (Atalay, 2015).

It is important for multi-faceted skill development that educational activities inside and outside the classroom are interactive at all levels of education. The acquisition of skills and behaviors related to learning and renewal should not be limited to merely in-school activities. The effectiveness of out-of-school or out-of-class learning environments that support learning experiences should also be utilized (Bozdoğan, 2016; Marulcu, Saylan, & Güven, 2014; Şahin, Ayar, & Adıgüzel, 2014; Pittman, 2024). Learning should not only be limited to the activities in the classroom environment in schools, it should be taken into consideration that any environment outside the classroom environment can be a learning environment and the designed activities should be diversified (Şen, Ertaş-Kılıç, Oktay, Ekinci & Kadirhan, 2021).

When compared to learning for school, out-of-class learning environments offer children individual practice opportunities and make learning permanent. Thus, children become active in the learning process. Learning becomes more concrete, and children gain mental, physical, social and spatial skills. Out-of-school or out-of-class education ensures that children's social aspects, awareness of the concept of time and time management skills, and friendship relations are reinforced. It is also argued that it contributes to the development of their self-awareness, self-confidence, leadership spirit and emotional awareness (Carrier, 2004; Cumberbatch, 1999; Halligan, 2006; Miller, 2008; Murdock, 2007; Schmitt, 2005). While the activities carried out in out-of-class learning environments positively increase students' attitudes towards learning, they are also effective in achieving success in the activities (Akgül & Arabacı, 2020).

From this point of view, in terms of supporting 21st century skills and raising qualified individuals, it is essential to determine the qualifications of out-of-class education activities in the pre-school period in the TRNC within the framework of 21st century skills.

In this context, the main problem question of this study was determined as follows: "What Are the Views of Teachers on Out-of-Class Learning Activities based on 21st Century Skills in Preschool Period?"

Depending on this main purpose, the following sub-objectives have been questioned in the study:

1. What are the demographic characteristics of the teachers participating in the research?

2. What are the out-of-class educational activities and what is their frequency?

3. What are the out-of-class educational activities?

4. What are the tools used in these activities?

5. What are the evaluation methods used in the activities?

METHOD

Research Model

In this study, it is aimed to develop out-of-class learning activities for 60-72 months old children in pre-school period.

For this purpose, qualitative research methods were used and the study was designed as an "action research". Yıldırım and Şimşek (2016) define qualitative research as follows: a research method conducted using case study, action study or phenomenology, where qualitative process is followed to reveal perceptions and events in a realistic and holistic way in their natural environment, employing patterns such as case study, action study, or phenomenology.

Study Group

The study group of the research consists of preschool teachers affiliated to the TRNC Ministry of National Education in the 2021-2022 academic year. All kindergartens on the island were reached based on the school list obtained from the TRNC Ministry of National Education, Department of Primary Education. No sampling was made in terms of schools, and it was aimed to reach the entire population, which was determined as 141. The entire population was reached and 97 kindergarten teachers voluntarily participated in the study from the accessible population.

Collection and Analysis of Data

All interviews were conducted face-to-face and data were collected using a semi-structured interview form. The interviews conducted throughout the study were subjected to content analysis and tabulated by assigning categories, codes and frequency values, and they supported with direct quotations for interpretation. Content analysis involves presenting the data with a descriptive approach, by sticking to the original form of the data obtained for a research as much as possible and by directly quoting the statements of the participants whenever necessary (Yıldırım & Şimşek, 2008).

Findings

Depending on the sub-objectives determined in line with the purpose of the research, the answers given by the classroom teachers to the open-ended questions were analyzed. The findings were tabulated as "demographic characteristics of the teachers participating in the study", "out-of-class educational activities ", "tools used in the activities" and "assessment methods".

Table 1: Distribution of the Demographic Characteristics of the Teachers Participating in the Research

Variables	Sub-groups	N	%
Age	23-29	9	9.3
	30-39	41	42.2
	40-49	23	23.7
	50 and above	24	24.8
Sex	Female	95	97.9
	Male	2	2.1
Years in profession	1-4 years	6	6.2
	5-10 years	7	7.2
	11-15 years	25	25.7
	16-20 years	17	17.5
	21-30 years	28	28.9
	31 years and above	14	14.4
Tenure in the Institution	1-4 years	26	26.8
	5-10 years	37	38.1
	11-15 years	19	19.6
	16-20 years	5	5.1
	21- 30 years	10	10.3

When the data in Table 1 are examined, it is seen that the majority of the teachers participating in the research are between the ages of 30-39 (42.2%), 24.8% of the teachers are 50 years or older, and the smallest group consists of teachers between the ages of 23-29 (9.3%). It is also seen that 97.9% of the teachers are women. It is among the findings of the study that 28.9% of the participating teachers have a seniority of 21-30 years, whereas 38.1% of the teachers have tenure of 5-10 years in their institution.

Table 2: Distribution of Out-of-Class/Out-of-School Educational Activities and Their Frequency

Variable	Sub-groups	N	%	
Activities are performed	Yes	94	96.9	
	No	3	3.1	
Frequency	Every day	3	3.1	
	1-2 times a week	45	46.4	
	3-4 times a week	12	12.4	
	Once in 2 weeks	12	12.4	
	Once a month	10	10.3	
	2-3 times a year	11	11.3	

The kindergarten teachers who participated in the study were asked whether they performed any out-of-class/out-of-school activities, and if so, what kind of activities they performed and how often. The findings obtained from the answers given by the kindergarten teachers are presented in Table 2.

As seen in Table 2, it was determined that 96.9% of the teachers participating in the study were conducting classroom/out-of-school activities, while 3.1% of them did not perform any out-of-class activities. The teachers participating in the study were asked how often they performed out-of-class activities. It was determined that 46.4% of the participants conducted out-of-class activities 1-2 times a week.

Table 3: Distribution of Out-of-Class/Out-of-School Educational Activities

Category	n	%
Story activities	11	11.3
Concept studies	15	15.4
Drawing works	10	10.3
Counting studies	16	16.4
Art works	27	27.8
Environmental observations	52	53.6
Trips	37	38.1
Experiments	7	7.2
Nutrition	27	27.8
Games	60	61.8
Dancing	6	6.8
Drama	5	5.1
Music	13	13.4
Sports	24	24.7

The preschool teachers who participated in the study were asked which out-of-class activities they performed. The findings obtained from the answers given by the preschool teachers are given in Table 3.

As can be seen in Table 3, the activities of the teachers participating in the study are as follows: 61.8% game activities (competitive games, playing in the park, blind man's buff, hide-and-seek), 53.6% environmental observation activities (tree observation, plant observation, ant observation, season observation, sky observation, soil observation), 5.1% drama activities, 6.8% dancing activities, and 7.2% experimental studies. Some of the direct quotes supporting these data are as follows;

"Trips, animal and season observation, plant familiarization, counting activity, Cyprus games, garden games." (T6)

"Physical education, nature observation, season observation, counting activity, playing, animal observation." (T40)

"Tree-bird-nature observation, playing, balance games, competition." (T54)

Table 4: Distribution of Tools and Equipment Used in Activities

Category	n	%
Waste material	21	21.6
Materials in nature	27	27.8
Ball	25	25.7
Chalk	24	24.7
Paint	20	20.1

Kindergarten teachers who participated in the study were asked about the tools they used in out-of-class teaching activities. The findings obtained from the answers given by the kindergarten teachers are shown in Table 4.

As seen in Table 4, the tools most frequently used by the teachers participating in the study in their activities outside the classroom are materials found in nature (stone, leaf, bark, stick, branch) (27.8%), ball (25.7%), chalk (24.7%) and waste material (21.6).

Some of the direct quotes supporting these data are as follows:

"I use all kinds of materials from nature in activities." (Ö66, Ö56).

"I use balls and chalk at events." (T32)

"I use mostly balls, chalk, strings and handkerchiefs." (T13)

Table 5: Distribution of Assessment Methods Used in Activities

Category	n	%
Question-answer	34	35,1
Chat	5	5,1
Observation	66	68,1
Animation	3	3,1
Application	21	21,6
Drawing	5	5,1
Repetition	12	12,3
Progress Monitoring	20	20,6
Mood	3	3,1
No assessment	3	3,1

Kindergarten teachers who participated in the research were asked how they assessed out-of-class/out-of-school teaching activities. The findings obtained from the answers given by the kindergarten teachers are shown in Table 5.

As seen in Table 5, while it was determined that observation (68.1%) and question-answer (35.1%) methods were used in the assessment process of the activities carried out by the teachers participating in the research outside the classroom, it was found that 3.1% of the participants did not use any assessment method. Some of the direct quotes supporting these data are as follows;

"I make observations during the assessment process of students." (S18, 32, 44)

"I find out whether children are learning through question and answer method." (T50)

"The observations I make while assessing the students, as well as the answers I receive in response to the questions I ask them, reveal whether the activity was comprehended at the desired level." (S97)

"Our school is deficient in terms of assessment, we do not make assessments, I can say this as a criticism."(S64)

DISCUSSION AND CONCLUSION

Out-of-school education environments support the continuity of education while providing a variety of teaching environments to children, and thanks to nature, they also activate different senses of children (Demirhan, 1998). It is seen that out-of-school learning environments positively affect variables such as children's achievement, attitude and opinion (Yıldırım Polat, S. N. & Gürsoy, G. 2023). Out-of-class education activities have an extremely important place in the development areas and learning of the child. Learning that takes place in any environment outside the classroom includes the learning process in which children are active, based on concrete learning by doing and living. The child is not a passive receiver of information any more, as he/she reaches information and develops problem-solving skills by analyzing and synthesizing. Thus, learning becomes more permanent (Ultaş, 2011). Out-of-class learning includes all activities performed outside the classroom. Therefore, any medium is suitable for carrying out educational activities. The schoolyard, park, street or nearby hospital is both an open space and an out-of-class learning environment. Apart from these, institutional areas such as museums, science centers and zoos can also be listed (Şen, 2019).

According to Seker, P. T., and Savas, O (2023), out-of-school learning environments support the development of children's skills such as problem-solving skills, self-care skills, muscle development and focus, and when considered as an educational program, they make a positive contribution to the concept development of those children.

Depending on the second sub-objective of the study, it was determined that 96.9% of the teachers participating in the study performed and 3.1% did not perform out-of-class activities. The teachers participating in the study were asked how often they conducted out-of-class activities. It was determined that 46.4% of the participants performed out-of-class activities 1-2 times a week. (İnce & Akcanca 2021) stated in their paper that the frequency of using out-of-school learning environments in the preschool education process is inadequate.

Depending on the third sub-objective of the study, among the out-of-class occasions of the teachers participating in the research, game activities (61.8%) (Competitive game, game in the park, blindfold, hide and seek) and environmental observations (53.6%) (Tree observation, plant observation, ant observation, season observation, sky observation, soil examination) were determined as the most popular activities. It is seen that teachers perform drama activities (5.1%), dancing activities (6.8%) and experimental observations (7.2%) less frequently. The concept of "out-of-class" describes the places that can be visited around or away from the school, starting from the school garden. In short, out-of-class learning environments start from the school garden and extend to distant environments (Loxley et al., 2016b). When the studies were examined, it was determined that among the educational activities carried out outside the classroom, there were museum visits with students (Karadeniz & Okvuran, 2014) and studies involving practical out-of-class educational activities (Ertaş, Şen & Parmasızoğlu, 2011; Şahin ve Sağlamer-Yazgan, 2013; Bozdoğan & Kavcı, 2016; Çobanoğlu & Cirit-Gül, 2017; Cirit-Gül, Apaydın, Çobanoğlu & Tağrikulu, 2018; Karakaya-Akçadağ & Çobanoğlu, 2018; Tağrikulu ve Yılmaz, 2019).

The closest and most accessible out-of-class space is the school yard. Thanks to the activities, experiments or observations performed in the park or yard before the class, children develop their skills of finding solutions or making new discoveries by directly exploring the problem; thus, they realize permanent learning (Çavaş & Huyugüzel-Çavaş 2014). They revealed that, in addition to classroom environments in the preschool period, external school learning environments such as science centers, natural history museums, aquariums, planetariums, veterinary anatomy museums and school gardens also support students' scientific process skills (Uludağ, G., & Erkan, N. S. 2023).

In line with the fifth sub-objective of the research, it was found that 68.1% of the teachers used the question-answer method in the assessment process, and 35.1% of the teachers used the question-answer method in the activities carried out outside the classroom, while 3.1% did not use any assessment method.

In their study, Ocak and Korkmaz (2018) found that all participants made assessments using the question-answer method after out-of-school teaching. In addition, the authors, who determined that assessment was made through free drawing and drama activities, stated that some preschool teachers did not perform any assessment as regards out-of-school learning activities.

When the findings as regards preschool teachers' views on out-of-school learning activities are examined, in the light of the interviews conducted with the preschool teachers affiliated with the Ministry of National Education, it was concluded that the most common out-of-class activity was "playing games", but that it was not adequate to support 21st century skills. Although the importance of activities such as experimental drama in terms of out-of-class educational activities is emphasized, it has been concluded that these activities are not at a sufficient level. In order for the people of the 21st century to be successful, they must be creative, reflective, critical thinkers, productive, enterprising; they should also be able to find quick solutions to daily life problems, use technology well, and place on the market what they produce (Tuğluk & Altın, 2018). Life and career skills, which are 21st century skills, should be introduced and supported by families and educators to children, and care should be taken to teach them consistently (Elci, 2021). They will be able to function by taking more solid steps in the knowledge and skills they will gain from an early age, and will be happy, psychologically strong and strong with the life skills they have acquired. Kerdthaworn, P. and Chaich computing technology, to promote. They will be able to provide support to society as individuals who are willing (Guney & Manavoğlu, 2022).

In the study, it was determined that out-of-school learning environments in the preschool education offer several advantages for children such as providing experience by observing concrete and real objects and events, associating learning with daily life, realizing permanent learning and learning by doing, yet, they are not used frequently enough. In this regard, it can be recommended to include more out-of-school learning activities in the preschool education curricular.

When the literature is examined, it is seen that studies on the employment of out-of-class learning environments in the preschool period are far from being adequate. In addition, this study included only 5-6 year old children. It is recommended to conduct studies that cover the entire pre-school period, i.e. children between the ages of 3 and 6.

Studies can be conducted to determine the competencies of teachers in planning, implementing and assessing 21st century skills in out-of-class learning environments, and solutions can be developed to provide and improve these skills.

REFERNECES

Anagün ġ. S., Atalay N., Kılıç Z. ve Yaşar S. (2016). Öğretmen Adaylarına Yönelik 21. Yüzyıl Becerileri Yeterlilik Algıları Ölçeğinin Geliştirilmesi: Geçerlik ve Güvenirlik Çalışması. PAU Eğitim Fakültesi Dergisi, 2016 (40): 160-175.

Arabacı, S., & Dönel Akgül, G. (2020). Okul dışı öğrenme ortamlarına yönelik fen bilgisi öğretmenlerinin görüşleri. International Journal of Scholars in Education, 3(2), 276-291.

Atalay, N. (2015). *Fen bilimleri dersinde öğrencilerin öğrenme ve yenilenme becerilerinin gelişiminde yavaş geçişli animasyon (slowmation) uygulaması* (Doctoral dissertation, Anadolu University (Turkey).

Beers, S. (2011). 21st century skills: Preparing students for their future.

Benek, İ. (2019). Sosyobilimsel stem etkinliklerinin öğrencilerin tutumlarına ve 21. yüzyıl becerilerine etkisinin incelenmesi. İstanbul: İstanbul Üniversitesi-Cerrahpaşa Matematik ve Fen Bilimleri Eğitimi Anabilim Dalı Yayınlanmamış Doktora Tezi.

Bozdoğan, A. E. (2016). Okul dışı çevrelere eğitim amaçlı gezi düzenleyebilme öz-yeterlik inancı ölçeğinin geliştirilmesi. Kuramsal Eğitimbilim Dergisi [Journal of Theoretical Educational Science], 9 (1), 111-129.

Bozdoğan, A. E. & Kavcı, A. (2016). Sınıf dışı öğretim etkinliklerinin ortaokul öğrencilerinin fen bilimleri dersindeki akademik başarılarına etkisi. Gazi Eğitim Bilimleri Dergisi, 2(1), 13-30.

Carrier, A. M. (2000). The emergence of democratic educational and experiential educational philosophies in the practice of outdoor education.

Cirit-Gül, A., Apaydın, Z., Çobanoğlu, E. O. & Tağrikulu, P. (2018). Fen öğretiminde Toulmin argümantasyon modelinin sınıf dışı (outdoor) eğitim süreci ile bütünleştirilmesi: Örnek Etkinlikler. Türkiye Bilimsel Araştırmalar Dergisi, 3(2), 103-120.

Cumberbatch, A. R. (2000). *The effect of outdoor environmental education on in-class behaviors of sixth, seventh and eighth grade students*. The Union Institute.

Çavaş, B. & Huyugüzel-Çavaş, P. (2014). Fen bilimlerinde öğrenme-öğretme süreci. Ş. S. Anagün & N. Duban (Ed.). Fen bilimleri öğretimi, s. 161-192. Ankara: Anı Yayıncılık.

Çobanoğlu, E. O. & Cirit-Gül, A. (2017). İlkokul 4. sınıf müfredatında yer alan cümlenin öğeleri konusunun sınıf dışı (outdoor) etkinliklerle desteklenerek öğretilmesi. Uluslararası Türk Eğitim Bilimleri Dergisi, 5(9), 521-531.

Dede, C. (2010). Comparing frameworks for 21st century skills. *21st century skills: Rethinking how students learn*, *20*(2010), 51-76.

Elçi, S. (2021). Öncesi dönem çocuklarının 21. Yüzyıl becerileri ile rekabet stilleri arasındaki ilişkinin incelenmesi. Yayınlanmamış Yüksek Lisans Tezi, İnönü Üniversitesi Eğitim Bilimleri Enstitüsü, Malatya.

Ertaş, H., Şen, A. İ. ve Parmasızoğlu, A. (2011). The effects of out-of school scientific activities on 9th grade students' relating the unit of energy to daily life. Necatibey Eğitim Fakültesi Elektronik Fen ve Matematik Eğitimi Dergisi (EFMED), 5(2), 178-198.

Güney Manavoğlu, A. (2022). Okul öncesi öğretmenlerinin öğrencilerine kazandırmaya çalıştığı 21. yüzyıl becerileri.

Halligan, M. W. (2006). Outdoor education for middle school youth: A grant proposal project. California State University, Long Beach.

İnce, S. & Akcanca, N. (). (2021) okul öncesi eğitimde okul dışı öğrenme ortamlarına yönelik ebeveyn görüşleri . Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi , (58) , 172-197 . Retrieved from https://dergipark.org.tr/tr/pub/maeuefd/issue/61832/886446

Karabiber, D. (2016). Okul öncesi dönem çocuklarının okul dışı etkinliklerinin incelenmesi (Master's thesis, Sosyal Bilimler Enstitüsü).

Karadeniz, C. & Okvuran, A. (2014). A night at the museum: Museum education with Ankara University students at Çorum Museum of Archeology. Elementary Education Online, 13(3), 865-879.

Karakaya-Akçadağ, Ç. & Çobanoğlu, E. O. (2018). "İnsan ve Çevre" ünitesi için sınıf dışı öğretim uygulamasının çevre okuryazarlığı üzerine etkisi. İnformal Ortamlarda Araştırmalar Dergisi, 3(2), 1-23.

Kerdthaworn, P. & Chaichomchuen, S. (2021). A Learning model of STEM Education on cloud computing technology, to promote learning and innovation skills for students practicing teachers. Journal of Physics: Conference Series, 1835, 1–10.

Loxley, P., Dawes, L., Nicholls, L. & Dore, B. (2016). Bilimsel sorgulama ve tutkulu meraklılık. (B. Akarsu, Çev.). H. Türkmen, M. Sağlam ve E. Şahin-Pekmez (Ed.). İlköğretimde eğlendiren ve anlamayı geliştiren fen öğretimi içinde, (s. 61-77). Ankara. Nobel Akademik.

Marulcu, İ., Saylan, A., & Güven, E. (2014). 6 ve 7. Sınıf öğrenciler için gerçekleştirilen "küçük bilginler bilim okulu" nun değerlendirilmesi /Evaluation of the little scientists' science school which was organized for 6th and 7th graders. Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, *11*(25), 341-352.

Miller, T. J. (2008). *The Alaska factor: Outdoor education program design in Alaska*. University of Alaska Anchorage.

Murdock, M. L. (2007). Outdoor education as a protective school-based intervention for" at-risk" youth: A case study examining the Muskoka Woods Leadership Experience for" Students of Promise" program.

OECD. (2018). The future of education and skills: Education 2030. Retrieved from https://www.oecd.org/education/2030/E2030%20Position%20Paper%20

Ocak, İ., & Korkmaz, Ç. (2018). Fen bilimleri ve okul öncesi öğretmenlerinin okul dışı öğrenme ortamları hakkındaki görüşlerinin incelenmesi. International Journal of Field Education, 4(1), 18-38.

Pittman, J. (2024). A 5-year global teach connection action-oriented study: an explorative analysis of of teacher needs for developing global teaching competencies. International Journal of Education, Technology and Science (IJETS), 4(2),1893-1940.

Sapsağlam, Ö. (2017). Examining the value perceptions of preschool children according to their drawings and verbal expressions: Sample of responsibility value. Egitim ve Bilim, 42(189).

Schmitt, T. R. (2005). *Teachers' perceptions of value and effects of outdoor education during an age of accountability* (Doctoral dissertation, Loyola University Chicago).

Sema, İ., & Akcanca, N. (2021). Okul öncesi eğitimde okul dişi öğrenme ortamlarina yönelik ebeveyn görüşleri. Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, (58), 172-197.

Şahin, F. & Sağlamer-Yazgan, B. (2013). Araştırmaya dayalı sınıf dışı laboratuar etkinliklerinin öğrencilerin akademik başarısına etkisi. Sakarya University Journal of Education, 3(3), 107-122.

Şeker, P. T., & Savaş, Ö. (2023). Okul Dışı Öğrenme Ortamlarına İlişkin Öğretmen Görüşlerinin İncelenmesi. Anadolu University Journal of Education Faculty, 7(1), 64-83.

Şen, A.İ. (Ed.). (2019). Okul dışı öğrenme ortamları. Ankara: Pegem Akademi Yayıncılık

Şen, A. İ., Ertaş-Kılıç, H., Oktay, Ö., Ekinci, S., & Kadirhan, Z. (2021). Learning science outside the classroom: development and validation of the out-of-school learning environments perception scale. Journal of Outdoor and Environmental Education 24, 19–36. DOI: 10.1007/s42322-020-00070-7

Tağrikulu, P. & Yılmaz, C. (2019). Sınıf dışı eğitimin mekânsal sorunların tespitine ve çözümlerine katkısının incelenmesi. International Journal of Geography and Geography Education (IGGE), (40), 23-39.

Tuğluk, M. N. & Altın, G. (2018). Liderlik ve sorumlukluk. Ed. Öğretir-Özçelik, A. D. ve Tuğluk, M. N. Eğitimde ve endüstride 21. yüzyıl becerileri içinde. Ankara: Pegem Akademi.

Uludağ, G., & Erkan, N. S. (2023). Okul dışı öğrenme ortamlarında etkinlikler içeren fen eğitimi programının 60-72 aylık çocukların bilimsel süreç becerilerine etkisi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*

Ulutaş, A. (2011). Okul öncesi dönemde drama ve oyunun önemi. *Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (6), 232-242.

Yıldırım, A., & Simsek, H. (2008). Sosyal bilimlerde nitel araştırma yöntemleri. *Ankara: Seçkin yayıncılık*.

Yıldırım Polat, S. N. & Gürsoy, G. (2023). Fen eğitiminde okul dışı öğrenme ortamına ilişkin yapılan tezlerin sistematik derlemesi. İnformal Ortamlarda Araştırmalar Dergisi, 8(1), 1-20