Theory and Practice in Child Development

https://tpicd.org

E-ISSN: 2791-9943

Volume: 5 Issue: 1 2025

pp. 38-62

Parents' Opinions on The Zoom-Ç (Curious-Child in An Enriched Play Environment) E-Twinning Project

Mürüvvet Kartal Baş*[a] & Belma Tuğrul[a]

* Corresponding author
E-mail: muruvvetbas@stu.aydin.edu.tr

a. Istanbul Aydin University, Türkiye

Article Info
Received: January 4, 2025
Accepted: February 16, 2025
Published: June 1, 2025

10.46303/tpicd.2025.3

How to cite
Kartal Baş, M., & Tuğrul, B. (2025). Parents' Opinions on The Zoom-Ç (Curious-Child in An Enriched Play Environment) E-Twinning Project. *Theory and Practice in Child Development*, 5(1), 38-62. https://doi.org/10.46303/tpicd.2025.3

ABSTRACT
ZOOM-Ç (Curious-Child in an Enriched Play Environment) was designed as an E-twining project in the 2023-2024 academic year. Throughout the project, lists of open-ended materials belonging to children in early childhood, reflections on the project process on families, and not determining perspectives on materials for open-ended materials before and after the project. A case study design was used to reveal in detail the sections of children and families who met open-ended materials with the ZOOM-Ç project and how and to what extent the open-ended materials were included in the homes. 80 parents were included in the study on a voluntary basis. While determining the participant details, it was stated that they should participate in all themes and families, fulfill their responsibilities, and have the competence to fill out the online form. The interview formula with semi-structured interviews used in the research was prepared by the researchers. This data, designed as a case study, was obtained through content analysis. According to the parents' opinions, opportunities were reached to support all development processes, including the variety of children's play sections, strategies and social development, with open-ended materials entering schools and homes thanks to the project services. Additionally, parents reported that the project allowed children to engage actively in school activities that were previously separated and that it fostered a stronger connection between the school and their children.

KEYWORDS
Early childhood education; open-ended materials; preschool education.

INTRODUCTION

Play, which is one of the most important needs of the child in terms of mental, social change and personal development, develops the children's self-confidence, meets their social and emotional needs and improves their ability to develop themselves.

According to Montessori, play is the work of learning, and also according to Frobel; play is "the liberation of the child's soul and the highest expression of child development" (Koçyiğit et al.,2007). Although the definition of play seems very simple, it is not a definitive definition, and for years, many educators, psychologists, and sociologists have defined it in the literature with different varieties (Else, 2009; Sluss, 2005; Wood, 2013; Wood & Attfield, 2005). Sluss (2005) stated that play is voluntary, symbolic, and free from external guidance and indicates the realization of pleasurable activities with actions performed with separation. Wood (2013) also stated that play is fun and is chosen by children and that players actively take the stage throughout the process. It allows children to develop in their entirety and create their own worlds (Gülhan, 2019). The relationship between children's play and many developmental areas has been touched upon (Broadhead, 2010). As Bento and Dias (2017) stated, contact with natural materials (sticks, stones, rocks, soil, etc.) offers a unique experience that captures children's attention and interest. Natural elements have open-ended features that children can imagine and respond to. In this process of reinvention and new meanings to objects (for example, a stick can become a gun, a boat, or a pencil), it is possible to take action regarding thinking, creativity, and problem-solving, among others (Bento & Dias, 2017). Play in early childhood education is a broad idea discussed by many theorists and philosophers. As emphasized by the works of many famous theorists such as Froebel, Pestalozzi, Piaget, and Vygotsky, play is seen as a cornerstone for learning in the history of early childhood. Research shows that learning through play increases the child's ability to understand a phenomenon better, which in turn reveals the skills for healthy academic and developmental outcomes (Miller & Almon, 2009; Roskos & Christie, 2001). The right to play is protected by the United Nations Convention on the Rights of the Child (Gök et al., 2021). Spencer et al. (2019) stated that open-ended activities at school improve children's imagination, problem-solving skills, and creativity. Play is not seen as different from the right to shelter or the right to protection. The importance of play for children's education and healthy development has been emphasized by many researchers from different genres and is now accepted as a valuable activity and child right (Brooker, 2010). When play and activities during the day are planned in an unstructured and child-focused manner, these learning and development opportunities are even more effective (Pellis & Pellis, 2007). Unstructured and child-friendly play allows children to create their own social networks, make independent decisions, and explore their own activities (Eisenberg et al., 2010). As a result, unstructured play is a valuable tool for children to acquire various developmental characteristics such as self-regulation, spacing, using higher-order thinking skills,

self-confidence, and exhibiting improved social behaviors (Pellis & Pellis, 2007). Cordiano et al. (2019) emphasized that nature-based unstructured practices contribute to children's educational and developmental processes; they stated that these practices support social development, creativity, imagination, and problem-solving skills. Holmes et al. (2019) stated that open-ended materials not only improve children's ability to find answers, but also encourage the use and development of research, active creativity, reflection of emotions and reasoning skills. In their study, Bundy et al. (2008) stated that teachers reported children being more social, creative, and resilient in areas where open-ended materials were present in the play environment. According to Kuh, Ponte, and Chau (2013), open-ended and natural materials, such as sand, water, and trees, are considered to be highly important for children's development. Mahony et al. (2017) indicate that enhancing children's play areas with open-ended materials in schools has a positive impact on their social development and well-being. Open-ended materials enable children to have enriching experiences and holistic development by developing their creativity and problem-solving skills. It is extremely important to include open-ended materials in early childhood education environments and to integrate these materials into educational practices (Aşkar, 2024). Oxfordshire Play Association (2014) defines 'loose parts' as items and materials that children and young people can move, adapt, control, change, and manipulate within their play. The theory, which is located in the literature as “Loose Parts”, can be first made by Simon Nicholson (Nicholson, 1972).

Since this theory, which is generally included as flexible or loose parts in Turkish studies, is mentioned to be more comprehensive, the concept of open-ended material was used in this study.

Open-ended materials can be natural or manufactured and can be combined as examples of water, sand, sticks, rocks, boxes, tires, buckets, and crates. Children exhibit more diverse play as they grow (Frost, 1992; Maxwell et al., 2008). Explorations made with open-ended materials support important skills such as multidimensional thinking, decision-making, creativity, problem-solving, self-confidence, and motivation (Smith-Gilman, 2018). The increase in obesity, diabetes and resistance seen in children in recent years, the increase in childcare and health of playing outdoors in Canada has been emphasized, and the need to research how children will increase their time and activities outdoors (Tremblay et al., 2015). Children are encouraged to spend more time in these areas thanks to the various natural opportunities and open-ended materials of outdoor play environments (Nicholson, 1971). In open-ended materials, children have mobile, indicated features that can be used in various ways (Daly & Beloglovsky, 2015; Maxwell et al., 2008). Therefore, in order for the play to be provided by governments to children from every socio-economic status and from every nation, it should be included in school curricula and the opportunity to play games should be offered in schools.

Instead of defining the content of open-ended materials according to their content, children are given the freedom to develop their play experiences according to their own ideas and them (Änggård, 2011). Open ended materials provide different opportunities. An open-

ended material that children encounter can have more than one use for the child (Gibson, 1977). For example, a rock can be perceived as something to jump or climb over, as well as a stick, sword or digging tool. Open ended materials provide opportunities for unstructured play that is not dominated by adults (Ridgers et al., 2012; Staempfli, 2009).

Open-ended materials can be found everywhere and can be found in educational environments because they are easy, accessible, sustainable and economical sources. Enriching play units in classrooms and homes with open materials and allowing children to use them as they wish is an important factor in facilitating learning and development (Casey & Robertson, 2016).

ZOOM-Ç (Curious-Child in an Enriched Play Environment) was designed as an E-twinning project within the scope of the doctoral course called "Play Research" in the 2023-2024 academic year. ZOOM-Ç Project was carried out in Istanbul province with 3 researchers, as well as its implementers and 1 consultant, in 153 schools in 35 different cities throughout Turkey, with 267 teachers and 4005 students.

The ZOOM-Ç project aims to introduce early childhood children to open-ended materials, to bring these materials to classrooms and homes, and to create a sustainable playground. Another goal is to support the positive recovery between factors and children through play, and to encourage open cells in homes. Including the projectability of children, open materials were collected in schools and there is a ZOOM-Ç enter in each classroom. In the created ZOOM-Ç corners, there are boxes, bottles, lids, straws, spools, rolls, natural materials (cones, stones, seashells, leaves), scissors, spoons, strainers, sponges, rolling pins, fabrics, and clothespins. This is also a ZOOM-Ç project where 3 project managers with early childhood children are involved in the education of children in their schools regarding the open-ended materials, the reflections of the project process on the families and their perspectives on the open-ended materials before and after the project. For this purpose, the following questions will be answered:

1. What are the opinions of parents of children in early childhood towards open-ended materials?

1-a) What are the opinions of parents of children in early childhood towards open-ended materials before the project?

1-b) What are the opinions of early childhood parents on the materials after the project?

2. What are the opinions of the parents participating in the project about the project?

3. What are the reflections of the project implemented at school and supported by family participation at home?

METHOD

Pattern

This research was designed with qualitative research method. The qualitative research method focuses on understanding the general perspectives and inductive approach of events and phenomena in their natural environments. The most important parts of qualitative

programming are the role-playing of the researcher, ensuring that perceptions emerge, and being flexible (Çokluk et al., 2011). For the purpose of the research, the case study design was used to reveal in detail how and to what extent the records of children and families who were introduced to open-ended materials with the ZOOM-Ç project and the open-ended materials were included in the homes. According to Yin (2013), a case study is an examination, formation, and events within the reality of maturity (Çapar & Ceylan, 2022). A case study is one of the various methods of conducting social scientific research. Case studies are classified as explanatory case studies (exploratory case study), exploratory (exploratory), and descriptive case studies (Yin, 2003). This study was designed as an exploratory case study.

Exploratory case studies are conducted to better understand a situation and learn information. The aim here is not to record general theories or generalize the obtained data to a larger group of individuals but to provide detailed information (Yılmaz, 2014).

A case study examines the anomalies of different situations holistically to investigate the issue in question (Ekiz, 2003).

Study Group

It is tangible when determining the study group of research. Purposeful programming allows the examination to be carried out by selecting information-rich situations depending on the programming method (Büyüköztürk et al., 2008).

The ZOOM-Ç Project was carried out in Istanbul with 3 researchers, as well as implementers and 1 consultant, in 153 schools in 35 different cities across Turkey, with 267 teachers and 4005 students. The universe of the study consists of parents whose children receive early childhood education and whose classroom teachers participated in the ZOOM-Ç project.

While 4005 students participated in the project, 80 parents were included in the study out of 4005 parents. 80 parents were determined by the purposeful sampling method.

The 80 participating parents were informed that they must be parents of the project managers' school, and that they must participate in all themes and family participation, fulfill their participant responsibilities, and have the ability to fill out online forms. The final interview questions were prepared to provide in-depth information in order to reveal the views of children and families who were introduced to open-ended materials with the ZOOM-Ç project, and how and to what extent open-ended materials were included in homes.

It was explained at the meeting that parents who could participate in the research voluntarily and comfortably in terms of time and project responsibilities would be included, and the research process was started with parents who could meet the conditions.

According to international literature, collecting the voluntariness of relationships is one of the most important validity measures (Merriam, 1998; McMillan &Schumacher, 2010). In the research conducted by Topu and his colleagues in 2013, it was stated that the voluntariness of the publications was taken as a comprehensive validity criterion in the literature (Topu et al., 2013).

Another aspect that was taken into consideration when determining the number of participants was the saturation point. According to Orcher (2005), the saturation point is reached when no new meaningful information emerges from additional data collection (Alabay & Ersal, 2022). In this study, it was seen that the data saturation was achieved with the voluntary participation of 80 parents.

Qualitative data analysis was conducted in the study. The credibility was ensured with the reference of Lincoln and Guba (1985). Lincoln and Guba's credibility criteria are as follows:
Long-term Interruption: The researcher was an active part of the application data collection process for 5 months, both as a project manager and researcher.
Deep Focus Data Collection: Semi-structed interview details were prepared so that the researcher could understand the nature of the events and facts (parents' perspectives on open content materials and unstructured plays and the internal reflections of the project process).
Data Triangulation: While the participants were in the database with part-time interview forms, family demonstration photos, and videos were used to follow the project process more closely. Relevant photos and videos are shared in regular online meetings and on the schools' social media pages.
Expert Reviews: While preparing the semi-structured interview forms used in the research, the opinions of two field experts who work in the field of forest schools and out-of-class learning environments in early childhood education are used before being finalized. Forest schools and out-of-class learning areas are listed because the questions within the scope of the research are related to open-ended materials and some of them are generally outside the classroom. Forest schools and outdoor learning areas help people to have deeper learning experiences and direct their own learning processes by frequently communicating with open ended materials (White and Stoecklin, 2014). After receiving expert training, the researcher conducted a pilot study with 26 mothers who would participate in the project from their own school. The mothers' evaluations of the success of the pilot, which was conducted face-to-face, showed progress.

While preparing the interview forms, the literature was first reviewed and examples of open-ended materials applied in national and international early childhood classes were provided. Before the questions were finalized, the opinions of two field experts working in the field of forest schools and out-of-class learning environments in early childhood education were used. The interviews were delivered to the parents online through the researcher and the answers were listed.

Process

In order to conduct the research, ethics committee permission was obtained before the data collection stages. The ZOOM-Ç (Curious-Child in an Enriched Play Environment) project was implemented between January and May 2024.

With the beginning of the project, project partner selection, project introduction meetings, posters, logos and project slogans were worked on. The planned activities were carried out in line with the project's work schedule. The ZOOM-Ç project teachers participating

in the project were in constant communication with the popular communication application that can be used on smartphones and the social media page created for the project throughout the project. Meetings were held on online platforms. Through the meetings held by the project consultant and managers with the project partner teachers, parents were informed in detail about the project process, their written permissions were obtained and their support was requested. Parents and teachers were the greatest supporters of the researchers throughout the project. Measurement and evaluation studies were conducted with parents at the beginning and end of the project and the results were analyzed. The data obtained from the open-ended questions were divided into themes and coded, and comments were strengthened with direct quotes that were considered important. While collecting data, process photos and videos from the schools where the project was carried out and on the active social media page of the ZOOM-Ç project were also evaluated as project outputs. Photos of the family participation processes of each determined theme were requested from the families, published on the social media page of the project through the project teachers and included in the analysis process.

The ZOOM-Ç (Curious-Child in an Enriched Play Environment) project was carried out between January and May 2024. At the beginning of the project, project partners were selected, and project introduction meetings, posters, logos, and project slogans were worked on. The process that started with project preparations and meetings in January began with the implementation of the first theme in February. The themes applied throughout the project are as stated in Table 1 below.

Table 1.

Themes and Timetable of the Research

Months	Theme	Family Participation
February	Balance	"Make Something of Everything" Event Day
March	Free Theme Inventions That Make Life Easier	"Make Something of Everything" Event Day
April	Child Friendly City Activities with Open-Ended Materials Outdoor The Bridges That Connect Us	"Make Something of Everything" Event Day
May	Outdoor Classroom Day Obtaining Parents' Opinions on Open-Ended Materials After the Project Through a Semi-Structured Interview Form with Families Within the Scope of the Zoom-Ç (Curious-Child in an Enriched Play Environment) Project	Participation in Outdoor Classroom Day with Families (Doing Something of Everything) with Open-Ended, Free Materials

Data Analysis

In this study designed as a case study, the data were obtained by content analysis. The content analysis process: coding of data, organization of themes, organization of codes and themes, and finally the functioning and interpretation of features were followed (Yıldırım & Şimşek, 2018). In the data analysis phase, the responses received were divided into themes based on certain

rules. Frequency values were examined with content analysis. The interview plan was decided by consulting 2 different field experts in terms of reliability. While creating codes and themes, literature was used, but expert opinions were again obtained to give it its final form. In this process, opinions were obtained from two separate academicians who are evaluation experts with expertise in qualitative research.

Data Collection Tools

The literature was first reviewed while preparing the interview forms, and examples of open-ended materials applied in national and international early childhood classes were provided. Before the questions were finalized, the opinions of two field experts working in the field of forest schools and out-of-class learning environments in early childhood education were used. The details of the interviews were delivered to the parents through the ZOOM-Ç project teachers. The first interview review in Table 1 is indicated as 1.1, 1.2, and 1.3., while the last interview details are indicated as 2.1 and later. The interview details and answer sources for the research questions are also given in Table 1. The research details, sources of the answers, and interview details are given in Table 1. While the pre-interview reviews are indicated as 1., the last interview details are indicated as 2. During the data collection phase, online forms were prepared and sent through the courses related to the 3-question lessons before the project and the 12-question lessons after the project. In addition, the family distribution photos from the parents of the project parameters were evaluated because they could be recorded. The research follow-up, interview details, and source are presented in Table 2 (see appendix).

FINDINGS

This title includes the answers and analyses given to the pre-and post-interview questions of the students who participated in the ZOOM-Ç (Curious-Child in an Enriched Play Environment) Project. The demographic information of the participating mothers is as follows: The age of the 80 participating mothers was 34.9.

48.7% of the 80 parents were university graduate mothers, followed by 30% high school students, 8% primary school students, 7% middle school students and 5% postgraduate student mothers.

Findings Obtained from Preliminary Interview Questions

The codes and themes that emerged after interviews with parents who participated in the first stage of this section are included. The codes obtained are stated as preliminary information about child-family interaction, child-family play characteristics, and open-ended materials.

Child-Family Interaction

The distribution of the responses to the question "Who does your child play with most at home?" in the current status of the study groups, the Child-Family Interaction code and the themes created under this code are shown in Table 3.

Table 3.

Child Family Interaction

Theme	f
Mother-Father-Siblings	61
Only Mother	16
By oneself	8
Grandmother-Grandfather	3
Total	88

Child-Family Play Features

The Child Family Play Features code was created based on the responses to the question “What kind of plays do you play if you play with your child?” The responses from the products include 6 themes in the corrected child family plays table. The most frequently repeated response was plays such as hide-and-seek, blind man's buff, and handkerchief grab, which are traditional games in the literature. This frequency order was followed by dramatic plays, intelligence plays, lego, and active plays, while the game-playing infrastructure was repeated 2 times. It is shown in Table 4. It will be placed here.

Table 4.

Children's Family Characteristics Play

Theme	f
Traditional Plays (Hide and Seek, Blind Man's Buff, Handkerchief Snatching)	42
Intelligence Plays (Skill, Educational, Mind and Board Plays, Puzzle, Play Dough)	19
Dramatic Play (House, Doctor, Teacher, Marketer)	12
Active Plays (Wrestling, Grappling, Dance, Ball)	12
Lego	8
I Don't Play	2
Total	95

Preliminary Information on Open-Ended Materials

Table 5.

Preliminary Information on Open-Ended Materials

Theme	f
Yes, yes.	
➢ Evaluating waste and recycling materials	12
➢ To use more than one play from one material	4
No, I haven't heard, I have no information.	67
Total	80

The responses to the question "Have you heard of open-ended materials before the Curious-Child in Enriched Play Environments (ZOOM-Ç) E-Twining project implemented at your school?" from the preliminary interview group were examined, and it was found that approximately 12% of the participants had heard of them beforehand. The characteristics of the open materials

data of 94 people who had previously owned it are given in the table. A significant majority, 88%, were introduced to places that the participants had not heard of before. It is shown in Table 5.

Findings Obtained from the Final Interview Questions

For the purpose of the research, the records of the children and families who were introduced to open-ended materials with the ZOOM-Ç project, the detailed explanation of how and to what extent the open parts were included in the houses, and the final interview details were collected in great detail.

The findings obtained from the analysis of the collected data have been organized and interpreted according to the sub-problems of the study. The six emerging themes are presented below.

1. Project Satisfaction
2. The Most Enjoyable Project Theme
3. Effects of the Zoom-Ç Project on Developmental Areas
4. Opinions on Family Participation
5. Open-Ended Materials Used at Home
6. Effects of the Zoom-Ç Project on the Perspective on Play

Opinions on Project Satisfaction

In response to the question "Were you satisfied with the ZOOM-Ç event?", 79 out of 80 respondents said they were satisfied.

Opinions on the Most Enjoyable Project Theme

Which of the ZOOM-Ç Project themes did you enjoy the most? The distribution of the programs in the responses to the question indicated that they found the theme of "Outdoor Classroom Day with Families" enjoyable by approximately (49.4%). This order was followed by Balance, The Bridges That Connect Us, Child-Friendly Cities, Inventions Making Our Lives Easier and Free theme. It is revealed in Table 6.

Table 6.

The most enjoyable project theme

Theme	**f**	**(%)**
Outdoor classroom day with families	39	49.4%
Balance	24	30.4%
The Bridges That Connect Us	9	11.4%
Child friendly cities	3	3.8%
Inventions making our lives easier	3	3.8%
Free Theme	1	1.3%
Total	80	100%

Opinions on the Effects of the Zoom-Ç Project on Development Areas

The analysis of the answers from questions 3, 4, 7 and 8 in the interviews indicated that they were supported in the areas of cognitive, social, emotional, language and motor development. The frequently repeated development area was cognitive development, followed by social

emotional development, motor development and language development. It is seen that they frequently mentioned imagination and productivity as indicated in the table. For example, E2 said, "*I think that he understands what is happening around him better and that I will observe his development in terms of growth*."; The parent with code E12 said, "*It supported his ability to participate in activities and to create his own play that he imagined,*" and emphasized communication-based socialization along with imagination.

E8 said, *"Creative designs can be made with materials other than toys*"; E22 said, "*Waste materials at home are never thrown away, everything is used for play now"* and indicated that alternative creativity is supported.

E1 said*, "In his country, my son has started to make many toys or materials using waste cardboard and development bottling and distribution at home. He has also developed in breaking many different materials and painting them."* Sustainability such as multi-dimensional thinking, play creation and manual skills are emphasized.

In the emotional and psychomotor development themes of the parent project coded E18, *"More enthusiastic about designing new things. Enrolling in activities that focus on manual activity rather than interesting toys* " Thus, he/she developed his/her manual skills and proved his/her productivity.

E29 emphasized that he strengthened his expression endurance in the conditions of medical development and language development with the statement, " *He can design it in his own way, convey both survival and use the teaching members he made on his own."*

Table 7.

Opinions Effects on the ZOOM-Ç Project's developmental areas for children

Theme	Sub Themes	(f)	(%)
Effects on Cognitive Development	Imagination	28	30.43
	Creativity	24	26.09
	Attention	14	15.22
	Focus	12	13.04
	Different and Multidimensional Thinking	8	8.7
	Play Creation	6	6.52
	Total	92	100
Effects on Social Emotional Development	Confidence	26	30.95
	Discipline	22	26.19
	Playing Together	14	16.67
	Solidarity	12	14.29
	Communication	10	11.90
	Total	84	100
Effects on Language Development	Peer Communication	9	56.25
	Expression	7	43.75
	Total	16	100
Effects on Motor Development	Balance	16	47.06
	Manual Dexterity	10	29.41
	Muscle Development	8	23.53
	Total	34	100

Opinions on Family Participation

According to the responses to the 5th and 6th questions of the interview, the following theme was created: Views on family participation. The sub-themes of social-emotional support and cognitive support were created under the theme. It is shown in Table 7. According to the responses from the parents, the views on family participation in the ZOOM-Ç project were created under 12 themes. They stated that they found family participation to be a beautiful, enjoyable, fun, quite creative and useful project that created unity. Parent-coded E18 emphasized that moving education outside the classroom is a different and positive approach with the statement, "It was an application in which the teaching process took place not only in the classroom environment but also made a positive contribution to the school environment and the external environment. Another of the most repeated themes was togetherness. Parent-coded E22 stated, "We enjoyed all the activities we did together in unity and solidarity, and we had good participation as parents," and parent-coded E29 stated, " We had projects where we both learned and had fun together with our teacher, parents, and children, and it was a separate happiness and memory for me to be with my daughter, I would like to thank our teacher very much," thus underlining the importance of togetherness and its place in the project.

Under this theme, participant coded E2 stated, "It was nice to actively participate with our child in this project that included fun and educational applications. It was a project with a good scope to raise a more environmentally sensitive generation." and underlined that the project was fun and beneficial in terms of environmental sensitivity.

It is shown in Table 8. Relevant images are added as Figure 1.

Table 8.

Views on Family Participation in the ZOOM-Ç Project

Theme	Sub Themes	(f)	%)
Social-Emotional Support	Pleasant	33	70.21
	Supporting Family Unity	12	25.53
	Partnership	2	4.26
	Total	47	100
Cognitive Support	Trainer	13	50.00
	Supporting Thinking Skills	9	34.62
	Informative	4	15.38
	Total	26	100

Open-ended materials used at home

The analysis of the responses to questions 9, 10, and 12 from the interview led to the emergence of the theme "Open-ended materials used at home." More than half of the parents (60%) stated that they had used open-ended materials before the project. After the project, 80% of the participating parents reported using open-ended materials at home, while 20% stated they did not use them. Among the 48 parents who answered the interview questions, they indicated that they had used open-ended materials in their homes before the project. The most commonly

used materials included wooden blocks, boxes, lids, straw rolls, and natural materials such as pinecones, stones, and leaves.

After the project, 64 people stated that they used open-ended materials at home. From the data in this table, it can be concluded that 16 parents started to use open-ended materials at home with the project.

Another data obtained from this table is that while structured materials such as play dough and board plays were used as open-ended materials in homes before the project, there was a change in the frequency of use of materials such as boxes, bottles, lids, straws, spools, rolls, home-kitchen materials (scissors, spoons, strainers, sponges, rolling pins, fabrics, clothespins) and natural materials (pine cones, stones, seashells, leaves), recycling, deteriorated toys, bags, batteries, and magnets as open-ended materials.

Participant coded E29 in the theme of open-ended material use after the project, "*We became aware that the game is not played only with ready-made toys and that we help prevent environmental pollution by recycling the materials at home and turning them into plays*." is shown in Table 8 (see appendix).

The Effects of the ZOOM-Ç Project on the Perspective of Play

When the answers to the question asked to parents, "*How did the ZOOM-Ç project change your children's perspective on play?"* were examined, 4 themes were created. Codes were created under each theme and analyses were conducted.

The themes of social effects and cognitive effects were the most repeated themes with codes. In addition, the answers given were being able to produce more, thinking differently and multi-dimensionally, developing imagination, being creative, dealing with open-ended materials, seeing everything as play material, being independent and self-confident, and contributing to recycling. Shown in Table 9.

Table 9.

Effects of the ZOOM-Ç Project on the Perspective on Play

Theme	Sub Themes	(f)	(%)
The Effect of Social Emotional Support	Interest in Open-Ended Materials	4	11.76
	Independent	2	5.88
	Confidence	2	5.88
	Ability to produce toys without purchasing, Creating products	15	44.12
	Ability to Set Up a Play	9	26.47
	Contributing to Recycling	2	5.88
	Total	34	100
Cognitive Support Effect	Creativity,	9	36
	Ability to use non-toy materials as toys	8	32
	Multi-dimensional thinking	5	20
	Imagination	3	12
	Total	25	100

The most frequently repeated codes under the theme of "Effects of the ZOOM-Ç Project on Perspective on Play" were "*Ability to produce toys without purchasing, creating products*" (n=15) and "*Ability to use non-toy materials as toys*" (n=8). Among the statements of the parents coded as being able to set up and create plays:

"He can create new plays more independently and with more self-confidence" (E2), "*He can create a new play, use the materials he has in various ways and make new toys.*

Examples include "*Plays are not only played with toys, everything can be turned into a toy"* (E18), *"My daughter saw that everything can be used as play material, and of course we, the parents, too*" (E22).

CONCLUSION

The ZOOM-Ç project aimed to introduce open-ended materials to early childhood children, to bring these materials to classrooms and homes, and to create a sustainable playground. This study aimed to determine the views of parents of early childhood children on open-ended materials, the reflections of the project process on families, and their perspectives on open-ended materials before and after the project. For this purpose, parental participation was carried out throughout the project, parents were informed about the implementation process at school during the project, and semi-structured interviews were conducted before and after the project.

The aim of the research was to determine the project participant parents' prior knowledge and opinions about open-ended materials through the ZOOM-Ç project, the reflections of the project process on families, and their perspectives on open-ended materials before and after the project. In the preliminary interview questions regarding the open-ended materials asked to the parents, only approximately 1/8 of the participant parents stated that they had heard of open-ended materials before. In response to the questions asked about the playing habits of children and families, parents stated that children mostly play with their parents and with structured play materials, plays with rules, and toys. According to the information obtained from 88 mothers in Konya through semi-structured interviews, Erbay and Saltalı (2012) found that children generally spend their time after school playing games and watching TV, while they generally prefer to play with their parents.

According to information obtained by interviewing 290 mothers in their research, Tezel Şahin et al. (2015) observed that children in rural areas generally spend time with TV at home, while children in the city spend time with toys. It was also observed that mothers in rural areas give children the opportunity to play outdoors, while mothers in the city allow them to do so only with the presence of an adult. Again, mothers living in both urban and rural areas occasionally play with their children.

Since children have more opportunities to encounter open-ended materials in nature and outdoors, it can be said that children have less need for structured materials and toys.

In the questions asked at the end of the project, almost all of the participating parents (98.75%) stated that they were satisfied with the project and that the theme they enjoyed the most was the "Outdoor Classroom Day", which they actively participated in in the schoolyard, with a rate of 49.4%.

The research conducted by Simoncini and Lasel in 2021 concluded that more than half of the families in the prepared open-ended play areas participated in their children's games without any invitation and enjoyed them. It can be stated that the creation of play areas with open-ended materials and the inclusion of families in the process increased child-family interaction and positively affected the relationships. The research conducted by Aşkar and Durmuşoğlu (2023) concluded that parents were pleased with the activities carried out with open-ended materials and wanted to be participants.

When parents' views on the developmental areas and play habits of children regarding the ZOOM-Ç project are examined, it is stated that it supports cognitive, social, emotional, language and psychomotor development areas. The findings obtained from the research support the findings in the literature that open-ended materials develop children's creativity, problem-solving, imagination, ability to produce new ideas, and courage in this regard (Cordiano et al., 2019; Holmes et al., 2019). Parents stated that children mostly have positive changes in their imagination, creativity, attention, focus, ability to think differently, play creation, balance, muscle and movement development, self-expression, peer communication, self-confidence, discipline, playing together, cooperation, and communication skills. As Bento and Dias (2017) also stated, contact with natural materials (sticks, stones, rocks, soil, etc.) offers a unique experience that attracts children's attention and interest. Natural elements are open-ended materials that can respond to children's imagination and needs. In this process of reinventing and attributing new meanings to objects (for example, a stick can be a gun, a boat, or a pencil), it is possible to activate skills related to different thinking, creativity, and problem-solving, among others (Bento & Dias, 2017). In the research conducted by Aşkar and Durmuşoğlu (2023), it was concluded that when open-ended materials were included in educational environments, children's social behavior, learning motivation and general happiness increased and contributed to the holistic development of children.

When open-ended materials are included in schools and homes and children are allowed to play and explore, they potentially support STEM teaching (Nipriansyah et al., 2021; Rahardjo, 2019; Wagland, 2018), and they also create an environment for high-quality art education (Hui et al., 2015; Smith-Gilman, 2018; Szekely, 2015). It can be said that children can evaluate their potential and are supported in all developmental areas with open-ended materials that entered schools and homes thanks to the ZOOM-Ç project. The results of research conducted in the literature on open-ended materials also support the parents' views in this study, which support the skills of children to form their own social networks, make independent decisions, use self-regulation, independence, use higher-order thinking skills, self-confidence and exhibit social behaviors (Eisenberg et al., 2010; Pellis & Pellis, 2007). According to the doctoral thesis study

conducted by Öcal (2021), it was concluded that open-ended materials used in educational environments give effective results in the development and learning areas of children, and that these materials support children's cognitive skills such as creativity and divergent thinking skills. According to the responses from the parents, the views on family participation in the ZOOM-Ç project were formed under thematic and subthemes. They stated that they found family participation to be a beautiful, unity-building, enjoyable, fun, quite creative and useful project. When parents communicate constructively with teachers and participate in school activities, they can learn better how to work at home to improve their children's education (Dauber & Epstein, 1993). Thanks to the ZOOM-Ç project, parents actively participated in their children's school activities and stated that they had a good relationship with the school and their children. It was stated by the participants that another advantage of the project was the satisfaction of parents being involved in the education process and being together with teachers and their children.

While 60% of the project participants stated that they used open-ended materials at home before the project, 80% stated that they also used open-ended materials at home after the project. Another data obtained from this statement is that while structured materials such as play dough and board plays were considered as open-ended materials at home before the project, there was a change in the frequency of using materials such as boxes, bottles, lids, straws, spools, rolls, home-kitchen materials (scissors, spoons, strainers, sponges, rolling pins, fabrics, clothespins) and natural materials (pine cones, stones, seashells, leaves), recycling, deteriorated toys, bags, batteries, magnets as open-ended materials. The most used of these materials were wooden blocks, rolls, and natural materials.

It has been demonstrated by various researchers that open-ended materials are objects that can be easily found, manipulated, changed, and restructured in various ways (Gull et al., 2019; Smith-Gilman, 2018), and that they enrich children's play by offering them countless possibilities with their portable, reusable, divisible, and combinable structures (Neill, 2018). Sizhan (2022) also suggested in his study that it would be beneficial to collaborate with families on the use of open-ended materials at home, and to conduct studies to increase parents' awareness of how free-part materials can contribute to the concept of sustainability.

Based on the responses from parents, 4 themes were created under the question of changing children's perspective on play. The most common response was the theme of ability to use non-toy materials as toys. In addition, the answers given were being able to produce more, think differently and multidimensionally, develop imagination, be creative, deal with open-ended materials, see everything as play material, be independent and self-confident, and contribute to recycling. In a qualitative case study conducted by Kiewra and Veselock in 2016, they investigated how natural open spaces affected the creativity and imagination of 80 children aged 3-5. According to the researchers, it was stated that open-ended materials in natural open spaces were one of the most important components that nourished children's divergent thinking and creativity and increased the depth and quality of their play. The theme of changing

perspective on play obtained from the ZOOM-Ç project supports the result obtained by Kiewra and Veselock. Parents who participated in the ZOOM-Ç project, which was designed to create awareness about open-ended materials and to develop positive attitudes, addressed their views on the play and the project in terms of their children's development. This study also sought answers to research problems for parents. Based on the limitations and results of the study, some suggestions can be made for early childhood education and other relevant institutions.

The Ministry of National Education (MEB), schools (especially kindergartens and primary schools), local governments, and non-governmental organizations supporting early childhood can implement various strategies to raise awareness of the use of open-ended materials in families. First of all, education and awareness programs can be organized for families. Schools and MEB can offer seminars, workshops, and practical guides to inform parents about the importance of open-ended materials and their contributions to child development. Workshops can also organize areas where families can work with their children. Schools can create special areas equipped with open-ended materials within their budgets and distribute material sets to families periodically. In addition, libraries and play centers can be established to provide children with opportunities to explore different materials. The use of open-ended materials can be encouraged through school curricula and MEB programs. Training for teachers can increase their ability to use open-ended materials effectively. In addition, teacher-parent collaboration projects can be organized and families, father involvement can be encouraged to participate in activities using these materials with their children. At this point, with the support of the digital world, social media, television, and radio programs can be used to explain the importance of open-ended materials to parents.

Teacher training can be provided to encourage parents to use open-ended materials instead of materials that are not economical and sustainable for the development of their children. Information meetings can be held with parents through teachers. Play planning days can be organized in schools where parents are included. In this way, families can develop awareness about the importance of play in the development of their children and the importance of open-ended materials in play. Some other suggestions can be offered to researchers:

It may be recommended to obtain more in-depth information by conducting focus group interviews with a small number of participants, with fewer and equal numbers of participants before and after the project. It can be investigated why families who do not use open-ended materials do not use them. Children's opinions about open-ended materials can be taken and examined.

REFERENCES

Änggård, E. (2011). Children's gendered and non-gendered play in natural spaces. *Children, Youth and Environments, 21*(2), 5-33. https://www.jstor.org/stable/10.7721/chilyoutenvi.21.2.0005

Alabay, E., ve Ersal, H. (2022). Çocukların problem davranışlarında annelerin ve büyükannelerin tepkilerinin incelenmesi. *Hacettepe University Faculty of Health Sciences Journal*, *9*(1), 120-150. https://doi.org/10.21020/husbfd.940973

Aşkar, N., ve Durmuşoğlu, M. C. (2023). Okul öncesi eğitimde açık uçlu materyallerle oyunun anlamı: Bir durum çalışması. *Journal of Qualitative Research in Education, 33*(1), 71-111. https://doi.org/10.14689/enad.33.1645

Bento, G., & Dias, G. (2017). The importance of outdoor play for young children's healthy development. *Porto Biomedical Journal, 2*(5), 157-160. https://doi.org/10.1016/j.pbj.2017.03.003

Broadhead, P. (2010). Cooperative play and learning from nursery to year one. In P. Broadhead, J. Howard, & E. Wood (Eds.), *Play and learning in the early years* (pp. 43-59). Sage Publications.

Brooker, L. (2010). Learning to play in a cultural context. In P. Broadhead, J. Howard, & E. Wood (Eds.), *Play and learning in the early years* (pp. 27-42). Sage Publications.

Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö., Karadeniz, Ş., ve Demirel, F. (2008). *Bilimsel araştırma yöntemleri*. Pegem Akademi.

Casey, T., Robertson, J., Abel, J., Cairns, M., Caldwell, L., and Campbell, K. (2016). *Loose parts play*. Inspiring Scotland. https://creativestarlearning.co.uk/wp-content/uploads/2020/05/Loose-Parts-Toolkit.pdf

Cordiano, T.S., Lee, A., Wilt, J., Elszasz, A., Damour, L.K., & Russ, W. (2019). Nature-based education and kindergarten readiness: Nature-based and traditional preschoolers are equally prepared for kindergarten. International Journal of Early Childhood Environmental Education, 6 (3): 18-36

Çapar, M. C., ve Ceylan, M. (2022). Durum çalışması ve olgubilim desenlerinin karşılaştırılması. *Anadolu Üniversitesi Sosyal Bilimler Dergisi, 22*(Özel Sayı 2), 295-312. https://doi.org/10.18037/ausbd.1227359

Çokluk, Ö., Yılmaz, K., ve Oğuz, E. (2011). Nitel bir görüşme yöntemi: Odak grup görüşmesi. *Kuram ve Uygulamada Eğitim Yönetimi, 17*(3), 379-408

Daly, L., & Beloglovsky, M. (2015). Introducing loose parts to preschoolers. *Teaching Young Children, 9*(1), 18-20. Daly, L., & Beloglovsky, M. (2015).

Dauber, S. L., & Epstein, J. L. (1993). Parents' attitudes and practices of involvement in inner city elementary and middle schools. In N. Chavkin (Ed.), *Families and schools in a pluralistic society* (pp. 53-71). SUNY Press.

Eisenberg, N., Valiente, C., and Eggum, N. D. (2010). Self-regulation and school readiness. *Early Education and Development, 21*(5), 681-698. https://doi.org/10.1080/10409289.2010.497451

Ekiz, D. (2003). *Eğitimde araştırma yöntem ve metodlarına giriş: Nitel, nicel ve eleştirel kuram metodolojileri*. Anı Yayıncılık.

Else, P. (2009). *The value of play*. Bloomsbury Publishing. https://doi.org/10.1093/acrefore/9780190264093.013.1431

Erbay, F., ve Saltalı, N. (2012). Altı yaş çocuklarının günlük yaşantılarında oyunun yeri ve annelerin oyun algısı. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi, 13*(2), 249-264.

Flannigan, C., & Dietze, B. (2017). Children, outdoor play, and loose parts. *Journal of Childhood Studies*, 53-60. https://doi.org/10.18357/jcs.v42i4.18103

Frost, J. L. (1992). *Play and playscapes*. Delmar Publishers.

Gibson, J. J. (1977). The theory of affordances. In R. Shaw & J. Bransford (Eds.), *Perceiving, acting, and knowing: Toward an ecological psychology* (pp. 67-82). Lawrence Erlbaum Associates, Inc.

Gull, C., Bogunovich, J., Goldstein, S. L., and Rosengarten, T. (2019). Definitions of loose parts in early childhood outdoor classrooms: A scoping review. *International Journal of Early Childhood Environmental Education, 6*(3), 37-52.

Gülhan, M. (2019). *Play in early childhood education: An examination of teacher roles during free playtime* [Yüksek lisans tezi Ortadoğu Teknik Üniversitesi]. Ulusal Tez Merkezi. http://etd.lib.metu.edu.tr/upload/12624051/index.pdf

Holmes, M.R., Gardner, B., Kohm, K., Bant, C., Ciminello, A., Moedt, K.& Romeo, L. (2019). The relationship between young children's language abilities, creativity, play, and storytelling. Early Child Development and Care, 189 (2), 244-254 https://doi.org/10.1080/03004430.2017.1314274

Hui, A. N., He, M. W., and Ye, S. S. (2015). Arts education and creativity enhancement in young children in Hong Kong. *Educational Psychology, 35*(3), 315-327. https://doi.org/10.1080/01443410.2013.875518

Koçyiğit, S., Tuğluk, M. N., & Kök, M. (2007). Çocuğun gelişim sürecinde eğitsel bir etkinlik olarak oyun. *Atatürk Üniversitesi Kazım Karabekir Eğitim Fakültesi Dergisi*, (16), 324-342.

Kuh, L. P., Ponte, I., & Chau, C. (2013). The impact of a natural playscape installation on young children's play behaviors. *Children Youth and Environments*, *23*(2), 49-77.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.

Mahony, L., Hyndman, B., Nutton, G., Smith, S., & te Ava, A. (2017). Mon-key bars, noodles and hay bales: A comparative analysis of social inter-action in two school ground contexts.Int J Play, 6(2), 166–176. https://doi.org/10.1080/21594937.2017.1348319

Maxwell, L. E., Mitchell, M. R., and Evans, G. W. (2008). Effects of play equipment and loose parts on preschool children's outdoor play behavior: An observational study and design intervention. *Children Youth and Environments, 18*(2), 36-63. 10.1353/cye.2008.0025

McMillan, J. H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry* (7th ed.). Pearson.

Merriam, S. B. (1998). *Qualitative research and case study applications in education* (2nd ed.). Jossey-Bass.

Miller, E., & Almon, J. (2009). *Crisis in the kindergarten: Why children need to play in school*. Alliance for Childhood.

Neill, J. (2018). Loose parts play creating opportunities for outdoor education and sustainability in early childhood. In T. Gray & D. Mitten (Eds.), *The Palgrave International Handbook of Women and Outdoor Learning* (pp. 623-635). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-53550-0_42

Nicholson, S. (1971). How not to cheat children, the theory of loose parts. *Landscape Architecture, 62*(1), 30-34.

Nicholson, S. (1972). The theory of loose parts: An important principle for design methodology. *Studies in Design Education Craft & Technology, 4*(2).

Nipriansyah, N., Sasongko, R. N., Kristiawan, M., Susanto, E., and Hasanah, P. F. A. (2021). Increase creativity and imagination children through learning science, technology, engineering, art and mathematics with loose parts media. *Al-Athfaal: Jurnal Ilmiah Pendidikan Anak Usia Dini, 4*(1), 77-89. http://dx.doi.org/10.24042/ajipaud.v4i1.8598

Orcher, L. T. (2005). Techniques for data analysis. *Conducting Research*, 135-160. https://doi.org/10.4324/9781315266626

Oxfordshire Play Association. (2014). Using loose parts for play. https://oxonplay.org.uk/

Öcal, E. T**.** (2021). *Preschool teacher's views and practices on using loose parts in daily activities* [Doktora Tezi, Ortadoğu Teknik Üniversitesi]. Ulusal Tez Merkezi. https://open.metu.edu.tr/handle/11511/92040

Pellis, S. M., & Pellis, V. C. (2007). Rough-and-tumble play and the development of the social brain. *Current Directions in Psychological Science, 16*(2), 95-98. https://doi.org/10.1111/j.1467-8721.2007.00483.x

Rahardjo, M. M. (2019). How to use loose-parts in STEAM? Early childhood educators focus group discussion in Indonesia. *Jurnal Pendidikan Usia Dini, 13*(2), 310-326. https://doi.org/10.21009/JPUD.132.08

Ridgers, N. D., Knowles, Z. R., and Sayers, J. (2012). Encouraging play in the natural environment: A child-focused case study of Forest School. *Children's Geographies, 10*(1), 49-65. https://doi.org/10.1080/14733285.2011.638176

Roskos, K. A., & Christie, J. F. (2001). Examining the play-literacy interface: A critical review and future directions. *Journal of Early Childhood Literacy, 1*(1), 59–89. https://doi.org/10.1177/14687984010011004

Simoncini, K., & Lasen, M. (2021). Pop-up loose parts playgrounds: Learning opportunities for early childhood preservice teachers. *International Journal of Play, 10*(1), 93-108. https://doi.org/10.1080/21594937.2021.1878775

Sizhan, A. (2022). 3-6 yaş çocuklarının dış mekânda oyun fırsatlarının ebeveyn görüşlerine göre incelenmesi. *Journal of Qualitative Research in Education, 10*(2), 15-28.

Sluss, D. J. (2005). *Supporting play: Birth through age eight*. Wadsworth Publishing.

Smith-Gilman, S. (2018). The arts, loose parts and conversations. *Journal of the Canadian Association for Curriculum Studies, 16*(1), 90-103. https://doi.org/10.25071/1916-4467.40356

Spencer RA, Joshi N, Branje K, Murray N, Kirk SF, Stone MR. (2021). Early childhood educator perceptions of risky play in an outdoor loose parts intervention. AIMS Public Heal. 8(2):213–28. 10.3934/publichealth.2021017

Staempfli, M. B. (2009). Reintroducing adventure into children's outdoor play environments. *Environment and Behavior, 41*(2), 268-280.

Szekely, I. (2015). Playground innovations and art teaching. *Art Education, 68*(1), 37-42.

Tezel Şahin, F. A., Aydın Kılıç, Z. E., ve Balcı, A. (2015). Erzurum örnekleminde şehir merkezi ve kırsal bölgede yaşayan annelerin çocuklarının oyun ve oyuncakları hakkındaki görüşlerinin incelenmesi. *Erzincan Üniversitesi Eğitim Fakültesi Dergisi, 17*(1), 25-45.

Topu, F., Baydaş, Ö., Turan, Z., ve Göktaş, Y. (2013). Common reliability and validity strategies in instructional technology research. *Çukurova University Faculty of Education Journal*, *42*(1), 110-126. https://doi.org/10.14812/cuefd.54285

Tremblay, M. S., Gray, C., Babcock, S., Barnes, J., Bradstreet, C. C., Carr, D., ... and Brussoni, M. (2015). Position statement on active outdoor play. *International Journal of Environmental Research and Public Health, 12*(6), 6475-6505. https://doi.org/10.3390/ijerph120606475

Gök, N. F., Uludağ, G., & Tuğrul, B. (2021). 48-60 aylık çocukların anaokulundaki oyuna ilişkin görüşleri ve oyun yoksunluğu. *Anadolu Journal of Educational Sciences International*, *11*(2), 549-571. https://doi.org/10.18039/ajesi.824261

Wagland, G. (2018). Reflection of S.T.E.M. activities using resources from the mobile junk and nature playground. *International Journal of Educational Methodology, 4*(1), 89-98.

White, R. & Stoecklin, V. (2014). Children's outdoor play and learning

Wood, E., & Attfield, J. (2010). Play, learning and the early childhood curriculum. Journal of Early Childhood Research, 8(3), 313-330. https://doi.org/10.4135/9781446280393

Yildirim, A., ve Simsek, H. (2008). Sosyal bilimlerde nitel araştırma yöntemleri (8th ed.). Seçkin Yayıncılık.

Yılmaz, G. K. (2014). Kuramdan Uygulamaya Eğitimde Bilimsel Araştırma Yöntemleri. M. Metin (Ed) Durum Çalışması içinde (261-285). Ankara: Pegem Akademi

Yin, RK (2003). Vaka çalışmaları tasarlamak. Nitel araştırma yöntemleri, 5 (14), 359-386.

Yin, R. K. (2013). Case study research: Design and methods (5th ed.). Sage Publications

APPENDIX

Table 2.

Research and Interview Questions and Source Information

Research Question	Source	Interview Question
1. What are the situations in which early childhood growth is faced with unstructured diseases?	Parent Responses	1.1. Who does your child play with most at home? 1.2. If you play , what type of games do you play?
2. Can you tell us what the early childhood child did towards open sources before the project?	Parent Responses	1.3. Have you heard from open users before the Curious-Child in Enriched Play Environments (ZOOM-Ç) eTwining project implemented in your school? If you want to know what they know about this, do you have any information?
3. What are the characteristics of the project participants regarding their projects?	Parent Responses	2.1. Did you enjoy the ZOOM-Ç event? 2.2. Which of the ZOOM-Ç Project themes did you enjoy the most? 2.3. Are you considering the time frames of the project? 2.4. If your answer is yes, in which development areas are the leaks? 2.5. Did you participate in family activities within the scope of the ZOOM-Ç project activity? 2.6. What information is available regarding ZOOM-Ç family activities? 2.7. Do you think the ZOOM-Ç project has changed the variety of play abilities at home? 2.8. If your answer is an event, explain how this productivity occurred. 2.11. How did the ZOOM-Ç project change your children's perspective on plays?
4. What are the early childhood projects against open materials?	Parent Responses	2.9. Can you use open materials at home? 2.10. If your answer is yes, which open members do you use? 2.12. Have you used open-ended applications before this project?
5. What are the reflections of the heart at home, implemented in school and with family participation?	Parents / Product Photo Sharing	2.5. Did you participate in family activities within the scope of the ZOOM-Ç project activity? 2.6. What information is available regarding ZOOM-Ç family activities? 2.7. Do you think the ZOOM-Ç project has changed the variety of play abilities at home?

Table 8.

Open-Ended Materials Used at Home

Theme	**Sub Themes**	**(f)**	**(%)**
	Box, Bottle, Cap, Pipette, Reel, Roll	29	37.66
	Wooden Block	14	18.18

Open-Ended Materials Before the Project (n=48)	Natural Materials (Cones, Stones, Seashells, Leaves)	9	11.69
	Home-Kitchen Materials (Scissors, Spoon, Strainer, Sponge)	11	14.29
	Play Dough, Slime	6	7.79
	Recycling, Broken Toys, Bags, Batteries, Magnets	6	7.79
	Mind, Intelligence and Board Plays (Jenga, Tangram)	2	2.60
	Total	77	100
We Started Using Open-Ended Materials After the Project (n=64)	Box, Bottle, Cap, Pipette, Reel, Roll	32	39.02
	Home-Kitchen Materials (Scissors, Spoon, Strainer, Sponge, Rolling Pin, Cloth, Pegs)	20	24.39
	Natural Materials (Cones, Stones, Seashells, Leaves)	16	19.51%
	Recycling, Broken Toys, Bags, Batteries, Magnets	14	17.07%
	Total	82	100%

Figure 1.

The mother and son in the schoolyard, with open-ended materials.

Figure 2.

The children are in the classroom with open-ended materials.

Figure 3.

The children and their mothers are in the schoolyard with open-ended materials

Figure 4.

The children and their mothers are in the schoolyard with open-ended materials