DAY-CARE CENTER CASE STUDY FROM PORTUGAL

TEAM
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”Teaching learning spaces competence from early childhood education”
2018-1-RO01-KA201-049545
Erasmus+ Strategic Partnerships for school education

Project

partnership:

Context – Day-Care Center

Age of children: *2 year-old children*

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Title of your contribution	Outdoor Senses Laboratory Transformation of outdoor spaces
Typology of learning spaces	Outdoor learning space
Development domain	Language and Communication domain; Science field; Human and Society Domain; Aesthetic and Creative Domain and Psychomotricity domain
Area of focus	*project-based learning, etc.* *learning by doing.*
Terms, acronyms and abbreviations	

Description of the case study (max. 1500 words)	**Aim and objectives of the intervention project:** Stimulate the five senses, highlighting the importance of children playing, exploring and learning outside. It has well defined several areas, such as the kitchen bela infância, sandbox, water territories (water circuits), circuits with tires, the relaxation area, music house, educational garden and at the same time, awaken environmental awareness. **Location (country & city):** Portugal, Chaves **Background and context** The Centro Social Paroquial de Chaves - Lapa building has a small outdoor space that serves as a playground. This space has synthetic floor and is equipped only with slides and some plastic houses, lacking other recreational facilities. However, as the building is in the heart of the city of Chave, the city's spaces are used daily for outdoor activities, giving priority to contact with nature and outdoor events. The project of construction/reconstruction of the outdoor spaces arose from the awareness of the educational team, in a wide debate of reflection on the practices, of the need to create/transform the outdoor spaces as potentiators of plural outdoor experiences that promote learning and well-being of children. In a pedagogical meeting, we identified the needs and potential of our outdoor space and through an approach based on participatory pedagogies, in favor of a holistic vision of the development of children and professionals, we designed our action plan. This space had the contribution of the school's professionals, the educational community, as well as the children and their families. **Main achievements** We started by gathering the pedagogical team in order to make a deep and joint reflection on our action and the understanding of the need to transform the outdoor space and consequently the transformation of practices in

	outdoor spaces, based on the paradigm "the outdoor space is also an educational space due to its potential and the educational opportunities it can offer, deserving the same attention from the educator as the indoor space. If the activities that are usually performed in the classroom can also take place in the outdoor space, it has characteristics and potentialities that allow an enrichment and diversification of educational opportunities" (Silva et al. 2016, p. 27). The organization of the outdoor space is an expression of our intentions and of the very dynamism of the groups of children. When thinking about the organization of these spaces, we needed to question and reflect on the function of these spaces, the purpose of their use, the quality and safety criteria, to base our options (Silva et al., 2016, p. 27). How to build spaces that are favorable to the integral development of the child? Why this space? What are the materials and the materials that will inhabit it? Does this space allow adults and children to connect? Given the size of the project, its realization required efforts and cooperation with various elements of the educational community. In this sense, we met online with parents to share the idea and benefits and to understand which parents were interested in collaborating with us to help us understand what was feasible or not, as well as what materials were needed for its implementation. **Hands on** Preparing the educational spaces requires a generous commitment to the action of planning. Our spaces were designed by the educational team, by our families, by the parish council - even during the pandemic it was possible to create bridges and involve everyone safely - when the availability that guides relationships... **Beautiful childhood kitchen**- This proposal arose from the signs observed when the children are in the make-believe areas and what they do when they go outside: They show curiosity for making food, for herbs leaves...

One parent suggested building a sturdy kitchen that would invite even more play. This message shared in the Whatwapp parent group allowed this little spark to spread to other parents who quickly organized themselves to share ideas and gather materials. At first, the mother of one child made the drawing and we shared it with the children and the direction of the institution that thought we could move forward. The parents, together with the team, gathered the material and went ahead with the project. In the meantime, a parent proposed to put a roof on it and in this way, besides protecting the "furniture" it would allow the children to live in that space even in the fall or winter.

The families gathered pots, metal cutlery, wooden spoons, metal, and plastic plates, cake pots, molds, microwave, coffee machine, saltshaker, glasses, and other metal recipients...

There was a concern to build the beautiful childhood

kitchen near a water point to allow the use of water for playing and especially for washing the materials.
The cabinets, with various materials, are accessible to children and divided by compartments, facilitating their organization and use.
A space that allows the representation of domestic and other social functions.
A space of enormous richness and that enables a panoply of experiences and learning. A place chosen by children to get closer to their peers and adults and to initiate interactions and create bonds of trust. A new outdoor play space... A space that welcomes and invites moving and stirring, pulling, kneading, throwing, investigating, researching, imagining, getting involved, finding oneself .... An environment full of meaning that silences cry and soothes anxieties. Through the variety of stimuli, opportunities, and unpredictability, the kitchen arouses in children a curiosity to know in an environment where they feel good and happy...

Sandbox - The sandbox emerged from the evidence observed in the Heuristic Play sessions with sand. We know that sand is a moldable material with personality, which allows children to explore and question: - What is that I feel with my hands, arms, and legs? Filling, emptying, passing from one side to the other, and the exploration of phenomena related to it. - What happens to the sand when it goes through the funnel? - When I throw it into the air and watch it fall? - What is this falling flow? We involve families in building the big wooden box and collecting natural materials (shells,

	stones, whelks, pinecones...) We should emphasize the use of treated sand and all its hygienization. We observe that the exploration of the sand becomes stories. From the relationship with others and the repetition of actions, words emerge. We observe that children are in deep investigation... theories, hypotheses, creations, games, negotiations emerge... Feet and hands in the sand and great manifestations of joy... To the sand, we add water, stones, trucks, machines, tractors, animals (characters that provoke the construction of dialogues) contexts that constitute worlds for symbolic play... Elements that invite, seduce, summon, and open possibilities for many provisional theories! The proposal of creating investigative contexts is a learning strategy that organizes spaces and materials for an inviting, investigative, and meaningful experience, creating connections. As Dubovi and Cippitelli (2018) state we must think "in contexts that challenge children to perceive themselves as creators, inventors, investigators..." (p.34). This research process has as its starting point the intentionality of the educator who observes and listens to children in their daily lives, continuing individual and collective research. The child observes, explores, manipulates, selects, weighs, compares, experiments, organizes, builds, creates, discovers direction, distance, limit, size, symmetry, balance. Increasingly, we believe that sand/land spaces should be an indispensable component at school, as they play an important role in the psychomotor, cognitive, and emotional development of children.

Water Territories: Another space created in partnership and parent involvement. The parents and the pedagogical team collected boards, funnels, hoses, tubes, bottles, and jugs and made the first draft of the water territories project.

Playing with water fascinates children and awakens their imagination. The possibilities are infinite, the lightness and fluidity experienced in contact with water provokes the little ones to surrender, which leads to different ways of playing and having fun. Water for playing and for research! Water to relax. Water that brings a potential of experiences that makes it possible for children to relate in a process. Water promotes play, charged with meaning. Much of our life happens outside and so does the curriculum.

Pedagogical garden: This proposal was made in partnership with parents and the parish council, with specific training moments for adults and children. The big earthen box was built by the parents. Our large concrete walls gave rise to hanging gardens using pet bottles.

The garden has proven to be an excellent learning space, allowing the children to learn about the rhythm of nature. For example, there are species that protect others, so they should stay close together - aromatic plants protect lettuce from pests, influencing the growth of one and the other. From the moment of its planning, its construction, its delimitation until planting, children and adults participates, observe, and feel the biodynamics of the different vegeital species, learning the importance of caring for and preserving nature.

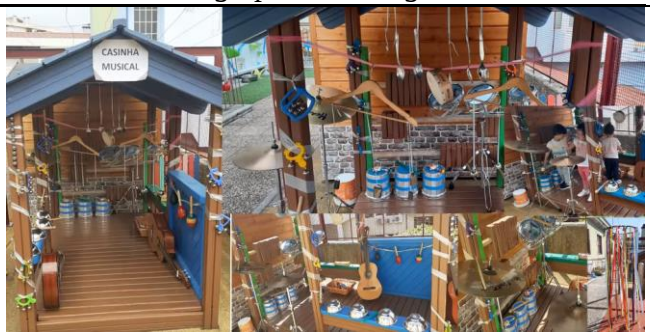
Relaxation/reading space: This space arises from the

children's need to relax, to find a calmer place. Children need these two moments "agitation" and "calm". Here there is a sofa built with pallets and soft impermeable cushions, which allow children to be comfortable when using this area, as well as some books and a table made from a tire.

Space with unstructured materials (loose parts): We provide large containers with unstructured materials (cones, bobbins, blocks, boards, pinecones, sticks, cans...) as play elements many of which are sent by families. Enabling a construction context with various materials that dialogue and suggest connections is essential. Materials that favor building at height, materials that provoke challenges for balance... here children have an active role, explore, stack, balance, compare, compose, classify, interact, question, analyze, solve problems... Children move through the space, discover colors, get lost, hide, find themselves, knock down.

There is a constant attention here, of the unfolding of play, giving color and movement to the materials, pointing out and confirming the factual relationship between the construction of space and play. We understand that "building is a complex process in which the child brings together various elements from his personal experience to create a work. It is in the process of separating materials with which they will build, giving them a different meaning than they have, that children show their ways of thinking, feeling, and seeing

	the world of discovering, of creating..." (Dubovik, 2018) **Musical Little House: Sound Enchantments** - A sound space outside, some conventional and unconventional musical instruments that provoke the senses. These sound moments are for children's intense occasions of play, in which they experience sonorities in their own way. The sensitive listening to this play indicates the possibility of a time and space for each child to experience and experiment their imagination. I am enchanted by the possibility of experiencing both languages... The children are invited to explore. This space quickly becomes an environment of encounters, exchange of experiences, relationships, ethical and aesthetic beauty... a place where children have pleasure to be, that cultivates curiosity and creativity, and enchants and surprises! A space that transforms and is transformed. I stay there observing the ways of playing, exploring, the movements, the choices, the relationships, the interactions, the way children guide their own actions. I observe the materials they choose and the compositions they create and record them so that we can expand the possibilities and create affective memory.



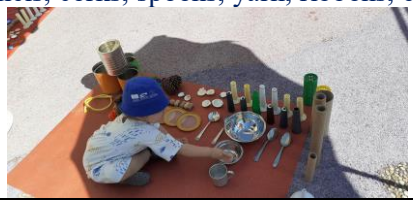
Circuits with tires and other challenges: This space is the result of several tires that parents put together, ropes, wires... The goal is to suggest to the children body movements such as climbing, descending, rolling, crawling, jumping, etc. The proposal is to assist the motor and body development of each child, challenged to test their own abilities and evolve, also promoting body perception in relation to their movement abilities. This is how we also allow the child to mobilize the body with more precision and coordination, developing endurance, strength, flexibility, balance, speed, dexterity...We have no doubts that it is necessary to have experiences that transit between multiple languages and multiple opportunities... respecting the time and the rhythm of each child.

Key factors

The motivations of the children, the team and the families became fundamental for the execution of the project. The previous cooperative dynamics and

	partnership strategies with the families with the parish council, were and are indicators to enhance the execution. The collection of soil in the natural environment; recycling containers; collection of pallets and boards in rural areas and construction companies facilitate greater environmental education. **List of useful equipments/resources needed** Beautiful childhood kitchen: pots, metal cutlery, wooden spoons, metal and plastic plates, cake bowls, baking pans, microwave ovens, coffee machines, salt shakers, cups, and other metal recipients. Sandbox: sand, we add water, stones, trucks, machines, tractors, animals, etc. Water grounds: boards, funnels, hose, tubes, bottles, jugs. Pedagogical garden: soil box, aromatic plants, etc. Relaxation space: pallets and pillows Space with unstructured materials: large containers with unstructured materials (cones, coils, blocks, boards, pine cones, sticks, cans...). Music House: conventional and non-conventional musical instruments; Circuits with tires and other challenges: various tires, strings and wires... **Challenges** The biggest challenge was in the management and division of tasks by the parents. **Categoria of improvements** It should be noted that the pandemic (Covid-19) did not allow the participation and involvement of many parents/families. Education is made in the collective and we need to be inspired to inspire... We need to be available, attentive,

	and involved. Now is the time to play, to play a lot, and to continue listening. Because thinking about environments prepared for children is to think that the space itself is already an invitation to play. The challenges continue and our families are still involved, more news soon.

Characteristics of the innovative spaces for active learning	a. Physical environment (design, light, surfaces, organisation, aesthetics etc.) The space is outside and therefore has full sun exposure, it is enriched with trees which allows it to have some overhang. The floor is cement based, but was enriched with artificial grass mats. The space has a very natural look due to the use of wood materials and natural elements such as plants. b. Furniture The furniture is mostly wood (pellets) with proper treatment, is functional, aesthetically pleasing, and in good condition. c. Working corners/ Interest Areas The defined areas are: Kitchen, Sandbox, Water territories, Pedagogical garden, Relaxation/reading space, Space with unstructured materials, Music house, Circuits with tires. d. Online/Virtual corner/learning space It is not observed. e. Materials: • Smart toys/devices It is not observed. • Sensorial materials Materials for auditory exploration (e.g. Little Musical House or Water Territories), tactile exploration (e.g. Sandbox), visual and olfactory exploration (Pedagogical Vegetable Garden). • Other Diverse unstructured materials such as: boxes, cones, tubes, containers of different sizes, funnels, corks, spoons, yarn, ribbons, etc. 
Benefits	**Teachers -** Our view as educators and learning facilitators focuses on what is important for the holistic development of children, articulating these experiences with the

	domains of the different content areas that we address, with educational intentionality, mathematical, linguistic and scientific concepts. The educational intentionality that we imprint in the organization of outdoor spaces, with its own exploration times, self-nourishes its organization and reorganization, undergoing evolution throughout the school year. This evolution emerges from the educators' observation of the children during the development of the educational game. Because the space is organized, the groups, the materials and the time, this allows the educator to place himself in a privileged role of observer. Exploring, adding some materials and removing others, modifying some structural elements that influence the child's interaction with what surrounds him, facilitating different experiences. **Children –** In these contexts children can feel the texture of sand, earth, wood, flowers... They hear the sound of birds, the wind, the life that is lived in the city, smell the aromas of the plants in the educational garden. They observe the colors of nature, the movement of the clouds and the trees, and feel the heat of summer and the cold of winter. Here the organization is flexible, favoring discovery and exploration, children carry, push, throw objects, moving freely, solving and overcoming problems they encounter during educational play. A rich, safe, free and authentic learning territory. In these spaces, the educator assumes himself as a manager of opportunities, a mediator, a promoter and a provocateur of learning possibilities through proximity, dialogue, questioning, problematization and construction of knowledge. Children observe, meet and interact with the materials and objects presented. They discover naturally and spontaneously and communicate their own interests to us with every gesture, movement, emotion, attitude, and word. It is necessary to consider the space as an ongoing research project, an

	aesthetically attractive space, with a great diversity of materials that promote play. **Parents -** Parents recognize the importance of children experiencing the outdoor space and the work that takes place there: Parents understand the way the outdoor space is organized because they were involved in the planning and construction and because children comment at home on their daily actions; Parents feel challenged to participate and adhere to the requests;
Discussions/ Reflection (aprox. 500 words)	Evaluations of the pedagogical approach, ergonomics of the new space created, furniture and materials to gain space We consider play to be a vital experience, a necessary condition for emotional well-being and a natural way of learning (Coelho, 2017), through which the child develops skills namely social and cognitive, constructing meanings. While playing, children imitate actions, reinterpreting reality, which often reveals their own experiences within the family. Playing make-believe, children communicate with each other taking on social roles, complexifying social interactions, developing a sense of self when they express initiatives, make decisions, and communicate with their peers. "Play is deeply linked to learning, especially in the early years of life, and it is through toys and play that children discover their role in the world" (Sarmento & Silva, 2017, p. 42) "Well-being and engagement, concepts introduced by Ferre Laevers, emerge as indicators that allow us to reflect on and evaluate the nature of the educational environment we provide for children" (Araújo, 2014) We can verify high signs of satisfaction, relaxation, inner peace, vitality, openness, self-confidence and attunement with oneself. We can observe children focused, motivated, creativity, posture and facial expressions. Looking at the spaces and thinking about how children relate to them is the way to ensure safety, play, exploration, development, among others...

Future directions/ Next steps	The partnership built with other institutions, namely with the School of Education of Bragança, helping us to broaden reflection and training, encouraging us in this unfinished journey of professional development and training. The construction of a musical space (musical wall).
Success stories and/or quotes (150 words)	The success of this space is seen by the children's smiles, their laughter and the sparkle in their eyes. The involvement with the material is full and the interpersonal relationships are positive, parents have given positive feedback reporting that their children recount with enthusiasm, curiosity and delight the significant experiences in it. Nothing better than to evaluate a space for children through the voice of the children.
What are the three key messages from this case study	1. The importance of transforming the outdoor space and consequently the transformation of the practices in the outdoor spaces. 2.The positive effects that these spaces provoke in children. 3.The processes of observation, reflection and transformation of practices requires time, continuity and reflection.
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