A Follow-Up Review on the Impact of a Participatory Action Research Regarding Outdoor Play and Learning

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Abstract: The aim of the study is to examine educators’ reflections on their practices and views regarding outdoor play and learning (OPL) and unveil the impact and sustainability of participating in participatory action research (PAR). The study draws back on the findings of a PAR conducted three years ago in two different school units that aimed to support children’s OPL. In the current research, we return to the research field, and with the participating educators we attempt to shed light on their experiences after the formal research came to an end. The research has a socio-cultural perspective on outdoor play and learning with references to participative and active relationships between cultural, social, spatial, and psychological factors. Participating in research where all participants were agents of the change (PAR) enabled the educators to enrich their pedagogical agendas and respect children’s need to play outdoors; it further helped them feel confident and develop competencies in designing outdoor activities. However, the findings unveil the challenges that educators face in creating sustainable outdoor landscapes due to the lack of sufficient supervision and governmental support. The study adds new data regarding the release of sustainable long-term changes both in outdoor pedagogies and settings.

Keywords: participatory action research; outdoor learning and play; school community; empowerment; teaching strategies

1. Introduction

At a time when outdoor environments are challenging 21st century perceptions of the classroom as the prime educational context for teaching and learning [1], it still remains challenging to develop a comprehensive definition of outdoor learning (OL). The study of outdoor learning is a developing field however the praxis points out the diversity and the evolving nature of OL that seeks to respond to the needs of each society. Potter and Dyment [2] (p. 148) avoid trying to establish a universal, static definition of OL since change seems to be the only constant in the outdoor education field. Debates around OL and whether it is a subject area or method of teaching, as well as the influence of program-specific outcomes, locations, and processes, have created for many people a vague context that leads to concerns around the value of OL. Based on our research background [3] and recent findings [4] (p. 121), it seems that the Greek educational culture has underestimated the importance of OL and the value of outdoor play in children’s cognitive development. As Parsons and Traunter mention [5], even if parents/guardians agree with the benefits of outdoor play, they are still hesitant about whether “real learning” can occur in outdoor environments and whether free play can produce learning and cognitive outcomes without a structured learning plan.

From an international perspective, there is a growing body of research regarding children’s need to play outdoors, pointing out the educational significance of outdoor spaces, children’s natural curiosity, and their need for direct experiences with their natural
environment [6]. Outdoor play, especially in natural environments, has significant potential to benefit children’s physical, cognitive, emotional, and social development, as well as their health and overall well-being, self-regulation skills, and attention [4,7]. More specifically, Bento and Dias [8] mention that through unstructured outdoor play, where children follow their instincts and interests without an imposed outcome or adult prescription in the natural environment, they develop resilience, creative thinking, and social and risk management skills. However, there are still many barriers [4,9] and challenges in promoting outdoor play in school everyday life. The study of Cheng et al. [10] stresses the need for professional development regarding the positive effects of outdoor play and how teachers can facilitate high-quality outdoor play experiences for children, overcoming a variety of school-based barriers.

Communicating the value, effectiveness, and applicability of OL and play in all spectrums of schools may have been hampered by a complex of factors such as the lack of national associations to connect outdoor educators or to guide curriculum [11], the limited attention that has been paid to the specific teaching and learning strategies [12], and to teachers’ education and training. Additionally, several studies have begun to point out [11–13] how the diverse spatial contexts (location, space, geography) of OL could affect the communication of the philosophy, value, and goals of OL and the fact that many mainstream schools face difficulties in accommodating OL practices in their settings.

There is a belief and more or less a trend implying that newly renovated beautiful outdoor settings can be the key factor in entering a new learning era, where outdoor learning and play would be embedded in the educational reality. Whether we consider the above assumption valid, we are in danger of perceiving the school environment as a neutral box where learning takes place. It is important to recognize that the space–learning relationship is not a quantitative relationship where better learning environments “produce” better learning processes [14]. Our previous research findings [3,15] suggest that environmental features alone are insufficient determinants of learning and playing outdoors since social, cultural, and personal factors are equally significant. School space is an organic microsystem consisting of dynamic, participative, and active relationships between cultural, social, spatial, and psychological factors [16]. The process of building or transforming a school site is a purely social process [17], and interest has already shifted from the building to the process.

Higgins [18], in his findings, reveals that the extent and ways in which school users are involved in the school planning process determine the success or failure of the resulting design. This is why many scholars propose the active participation of children in the designing of learning spaces, as they themselves know better what they need [19]. Children’s participation in decision-making and in the design process is an essential element in the proper functioning of their social and intellectual development; it enriches their design capabilities and, at the same time, contributes decisively to their overall development [16]. Space and place are clearly distinct concepts, as space becomes a place when enriched with meanings and values. The place is a subjective version of space linked to the desires, choices, and needs of the person living in it. Participation is the key to transforming space into place and implies an open process during which people can influence decision-making about how and what their physical spaces should become [20].

Based on the limited research efforts on the active participation of students in the design of play and learning environments, it is evident that in Greece, children are almost excluded from the decision-making process of the transformation of their school spaces [21]. The stereotypical features, the impoverished natural environment, the unchanged identity since 1894, and the low degree of complexity in the outdoor school environment [22] limit the richness and diversity of children’s and teachers’ interaction with their school environment in order to transform them to learning and play places. Here lies a problematic tendency where inelastic and stereotypical school design promotes specific educational practices, which usually lead to narrow goals and objectives, preprogrammed methods, and the use of a technocratic ‘skills-and-testing framework’. Contrary to the
above pedagogical orientation, the innovative approaches in the field of OL pay attention to place and time in the form of place-responsive pedagogy [23] and slow pedagogy [24], which require educators to be flexible and creative and have the ability to recognise differences in ecological and social domains, respond to place and its entities through facilitation of pupils’ first-hand experiences, and encourage learners to make meaning through embodied, timeless, sensual–perceptual, relational, place-based experiences.

Our study draws back on the findings of participatory action research (PAR) conducted three years ago in two different school units that aimed to support children’s outdoor play and learning (OPL) through engaging all the school community members in the processes of decision-making, designing, and transforming the outdoor school environment [15]. Each research is unique, and as researchers, we were called to take action based on the current understanding of the problem situation through interactions with involved participants and upon achieving consensus on planned actions [25]. PAR proved to be an appropriate method to empower communities previously subjected to bureaucratic top-down planning systems. The findings suggest that PAR benefits the planning process as it moves beyond the transformation of physical space to include the social change that aims to develop the equal distribution of power in decision-making by embracing values such as empowerment, collaborative relationships, and learning.

In the current research, we return to the research field, and collectively with the teacher-participants we attempt to shed light on their experiences three years after the completion of the PAR. The PAR was initially triggered by the two main concerns raised above. On the one hand, there was the need to investigate the perception and aspects of OPL in a country (Greece) where (a) outdoor learning and play are absent from the Early Years Curriculum and teacher’s training, and (b) the relationship between the outdoor environment and the young children had not been researched or explored. On the other hand, the concern was addressed to the main users of the school environments (children and teachers) who did not have the opportunity and the means to designate their own space–time system in the school environment and to interact with its elements, transforming it from space to place. The aims of the current study, three years after completing the PAR, are (a) to examine educators’ reflections on their practices and views regarding OPL and (b) to unveil the impact of participating in a PAR.

2. Materials and Method
2.1. Design Procedure and Analysis

An effective follow-up study requires an understanding of (a) the social context in which the follow-up is being conducted, (b) the purposes associated with the follow-up study, and (c) the manner in which the follow-up evaluation data will be used. [26]. In this section, we will present the methodology frame of both PAR and follow-up study (Table 1), complying with the above requirements.

Table 1. Methodology overview in PAR and follow up review.

<table>
<thead>
<tr>
<th>Research Paradigm</th>
<th>Participants</th>
<th>Transformative paradigm [27] Knowledge is real if it can be transformed into a practice that empowers and transforms people’s lives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participation Action Research</strong></td>
<td><strong>School Unit 1</strong> (suburban)</td>
<td>Social-constructivist paradigm [28] Knowledge is a human product and is socially and culturally constructed. Individuals create meaning through their interactions with each other and with the environment in which they live</td>
</tr>
<tr>
<td><strong>Follow Up Review</strong></td>
<td><strong>School Unit 2</strong> (urban)</td>
<td><strong>School Unit 1</strong> (suburban)</td>
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</table>

PAR lasted nine months (a school year), and it was guided by a transformative paradigm where knowledge is real if it can be transformed into a practice that empowers and transforms people’s lives [27] (Table 1). During PAR, we used different participatory techniques based on the Mosaic approach [29] both with adults (educators, parents) and children; we embraced values of empowerment, collaboration, and collective meaning making for nine months. The researcher (author) had a constant presence in schools, consulting, supporting, and participating in all the processes as needed, not just sharing her knowledge. PAR included spiral rungs of “time points”: planning, action, observation, and reflection. We focused on a two-way communication [30] between participants and the researcher where information was exchanged through constant dialogue, negotiation, frequent meetings, and workshops conducted at different time points according to our needs.

In the present research, we adopted an interpretative phenomenological analysis approach (Table 1) that aims to provide detailed examinations of personal lived experiences [31]. We collected our qualitative data through reflective group conversations, observations, and in-depth interviews. Interviews and group conversations were chosen because they can serve as powerful tools for ‘eliciting rich data on people’s views, attitudes, and the meanings that underpin their lives and behaviours [32] (p. 213). The group conversations were conducted while the researcher visited the school for the observation; the interviews were planned based on teachers’ availability and lasted between 60 and 90 min. The interviews were transcribed and, together with the researcher’s notes, were first read and reread many times to identify interesting sections and explore semantic content. Then, the researcher started developing emergent themes and searched for connections between them. Finally, the researcher tried to find patterns of shared higher-order qualities across cases and deepened the analysis by utilizing metaphors and temporal references [30].

### 2.2. Participants

The process of selecting participants during PAR has a quite different philosophy and approach compared with participant selection processes in other qualitative and quantitative research. During PAR, the participants are not research subjects but active participants in the research, involved in all its stages. Similarly, in our research, the beginning of the research was marked by the participants themselves, who knew the researcher from other research activities. Selenger [33] identified seven key elements of the PAR process. The first element recognises the fact that the problem you are studying derives from the community itself. In our case, the school community defined, examined, and analysed the problem and came up with solutions. The process of PAR helps people question and rebuild their abilities to influence the world around them while actively participating in

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**Data Collection Tools**

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<tr>
<th>Description</th>
<th>Data Collection Tools</th>
<th>Data Analysis</th>
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<tbody>
<tr>
<td>23 children (4–6 y/o) 20 children (4–6 y/o)</td>
<td>Semistructured interviews, teacher’s and researcher’s diary records, material evidence from children, teachers, and parents (photographs, maps, drawings), focus groups, participant and nonparticipant’s observation</td>
<td>Grounded Theory: sets out to discover or construct theory from data systematically obtained and analysed using comparative analysis</td>
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<tr>
<td>3 teachers (females: 33–46 y/o) 2 teachers (females: 35 y/o) 20 parents (27–52 y/o)</td>
<td>Reflective group conversations, nonparticipant’s observations, and in-depth interviews</td>
<td>Interpretative Phenomenological Analysis: approach that aims to provide detailed examinations of personal lived experience</td>
</tr>
<tr>
<td>20 teachers (females: 36–49 y/o) 2 teachers (females: 38 y/o) 20 parents (25–48 y/o)</td>
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<tr>
<td>2 teachers (females: 33–46 y/o) 2 teachers (females: 35 y/o) 20 parents (27–52 y/o)</td>
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making important decisions [34] (p. 30). Two different school units participated in PAR; in total, the participants were 43 children (4–6 y/o), 5 teachers (33–46 y/o), and 40 parents (25–60 y/o) (Table 1).

In the last four years, before the PAR began, the teachers and the parents’ association from the first School Unit (SU1) (Table 1) were trying to transform the outdoor school environment. Unfortunately, because of the financial problems, bureaucracy, and lack of community support, they were not able to make the necessary changes so that the outdoors could accommodate their daily school life. Consequently, the outdoor school environment over the years has remained unsuitable for both children and adults (Figures 1 and 2). At the urging of the school principal and the support of the school counsellor, the teachers at the school contacted the researcher. The school principal and one of the teachers had taken part in previous qualitative research with the author/researcher; hence they were already feeling comfortable with her. Their first motive, as a team, was to improve their strategies and practices in the outdoors and transform the outdoor school environment in order to be safer and more stimulating. After the first informal meetings between the researcher, the kindergarten teachers, and the school counsellor, the researcher proposed an action plan based on the concerns, needs, and availability of the participants. The main feature was the child-centred orientation of the plan and the necessity of commitment, which would be based on the goals we would all set together. Then, the kindergarten teachers, together with the school counsellor and the researcher, informed the parents, and following the consent of the entire educational community, the PAR process began. SU1 was located in the northwest part of Greece that lies on the coast of the Ionian Sea, in a suburban area with 23 children, 2 teachers, and the teacher-principal.

During the first month of conducting PAR in the SU1, the researcher was contacted by a teacher who had also participated in the author’s previous research. In this case, School Unit 2 (SU2) was located in a rural area with 20 children and 2 teachers. Similarly to the SU1, the teachers in SU2 were trying for a year to transform the outdoor school environment in order to accommodate their daily educational needs; however, they had not managed to reach their desired result mainly because of the absence of local community support and the lack of funding. The researcher, after the first communication with the teacher-principal of the second school unit (SU2), followed the same steps as in the first case (SU1), and the PAR started in SU2 as well. The natural element prevailed in the outdoor environment of the SU2; however, it was an amorphous space with no signs of its users’ identity.

Within this context, for the purposes of the current follow-up research, 4 out of the 5 teachers (Table 1) who participated in PAR were involved in the process of reflection and collective meaning making based on our research aims. One of the teachers from SU1 that initially participated in PAR did not participate in the follow-up review because she was on maternal leave.

2.3. Ethical Considerations

The research received approval from the Research Ethics Committee of the University of Ioannina, Greece. All participants were informed of confidentiality, and their consent was obtained, with the option to withdraw. An information letter and consent form were provided to all participants providing a clear understanding of what they are involved in and their right to withdraw.

3. Results

Before we start discussing our results, we are presenting in Table 1 the main factors that affected and constrained children’s outdoor play and learning in our two cases when PAR started.

The factors described in Table 2 worked as keystones for the selection of the appropriate methods and techniques to empower the school communities. Thus, strategic action
during PAR worked on three levels based on the above factors (Table 2). It was used to improve personal practice and outdoor settings and support an active network engaging parents, the local community, and the architect consultant. Our goal was also to adapt Mosaic approach techniques in our strategic action [32] (workshops based on participants’ ideas and preferences, drawings, mapping, walking tours, photographs, magic carpet, role-playing, both in adults and children); in this way, adults came in touch with this approach first hand, and it was much easier and meaningful for them to perceive the participatory methods and apply them with children.

Table 2. The main factors affecting children's play outdoors during PAR.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Subcategories</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal</td>
<td>1. Training and consulting</td>
<td>1. They felt unable to use the outdoors and attach to it an educational role since the “Teacher’s Guide” emphasizes only on ways of using the indoors as it is supposed to be the main settings where learning takes place.</td>
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<tr>
<td></td>
<td>2. Adult concerns/child’s independence</td>
<td>2. Their fears and concerns about the unwelcoming outdoor physical environment prevented teachers from valuing critically the spontaneous or unplanned child-initiated activities that frequently occurred outdoors.</td>
</tr>
<tr>
<td>Outdoor Settings</td>
<td>1. Design and quality of play structures/equipment</td>
<td>1. Improper paving, lack of maintenance, inappropriate play structures, lack of equipment</td>
</tr>
<tr>
<td></td>
<td>2. Environmental factors/urban planning/safety</td>
<td>2. Elements of urban design and the surrounding environment affected the place—time choices</td>
</tr>
<tr>
<td></td>
<td>3. Affordances</td>
<td>3. Lack of availability of functional elements in the outdoor environment</td>
</tr>
<tr>
<td>Social</td>
<td>1. Educational culture</td>
<td>1. Formal and informal outdoor experiences were perceived by many as ‘filling in time’ or as a ‘break’ from the ‘real’ learning that takes place indoors</td>
</tr>
<tr>
<td></td>
<td>2. Parents and School Communication</td>
<td>2. Teachers did not sufficiently and systematically inform the parents about the benefits of outdoor play and learning</td>
</tr>
</tbody>
</table>

After completing the PAR, the school communities, together with the researcher, set the goals of enhancing space and time opportunities for outdoor learning and play in the school units, sustaining an active network and communication with parents and the local community, and supporting a sustainable participatory culture with children, transforming teachers’ role. The interviews and the conversations with the teachers in the present research were structured on the basis of these goals and the research aims.
3.1. Teaching Strategies and Practices

Returning to the research field three years after, we observed that teachers seemed more comfortable transforming and challenging their roles even after the end of the research. They act more supportive of children’s curiosity, and many times they are actively engaged in children’s play. More significantly, they seem to embrace the challenges of the outdoor environment and the ever-changing nature of these environments, willing to adapt their teaching plan.

“Outdoor learning seems to be about observation outside the box and is different from what we (as teachers) design. This unknown may challenge my knowledge and put me through a collective research way of thinking and meaning making with children. I can’t be the omniscient teacher, because now when outdoors I am learning with them.” T3

Teachers seem to correspond to the children-initiated activities slowing down the pedagogical pace and questioning the assessment-driven teaching and learning models. Slow pedagogy provides an alternative pedagogical approach to the current widespread fast-paced, disconnected, standardised models of teaching and learning. Instead, this approach encourages learners to make meaning through embodied, timeless, sensual–perceptual, relational, and place-based experiences [24]. Teachers clearly present the experiential conditions of learning as the most valuable during the year, focusing on the way that children construct their meaning making and collectively with teachers are engaged with scientific content knowledge. Moreover, as in the Skarstein and Ugelstad study [35], teachers expressed their lack of knowledge or lack of awareness as a challenge. Gustavsson and Pramling [36] mention that teachers’ ability to recognise and support informal learning situations may have a significant impact on the quality of unplanned activities.

“Children noticed after the first autumn rains, snails near the tree. We all wondered why we see them in the morning and not at noon? We all got excited about the project and it was the most “popular” memory of the year. It was very much reflected in their work and parents told us that children mentioned it at home. We started a project based on children’s observations and they had an active involvement with the research and reflection. It was also a reason for environmental discussion and concerns because at first the children stepped on the snails, killed them and threw them away. They only questioned their behaviour when we started researching and observing the snails. After we collected some for observation the children suggested that we release them into the wild again. This project also helped them deal with their fears among other animals and insects living in our schoolyard.” T1

We observed a significant range of enacted teaching strategies and practices based on the examples that teacher offered us. They demonstrate a range between behaviourist teaching and learning strategies and constructivist and socio-constructivist strategies. This movement between the approaches is mainly affected by potential safety issues. Teachers, in order to prevent possible accidents outdoors, start working with small group activities; in this way, they feel more comfortable dealing with their personal fears, but at the same time, they offer children the space and time to deal with situations they love and choose.

“After the research, the next few years we understand that our insecurity was linked to situations that kids loved (play with muds, climbing etc.). During the research (PAR) we observed all the benefits and valuable learning experiences that kids had through these activities and we tried as teachers not to let our fear becomes an obstacle.” T4

“After the research, we were able to sustain the garden. This setting offered some occasions for experiments, playing with water and soil, we created mud. Children were very happy about these activities and we noticed that because when we created small groups to go out and take care of the garden, it was one of their favorite activities. It was not just an activity during the break but it was during the lesson with the teacher accompanying each group.” T2
3.2. Self-Efficacy, Team Working, and Visibility

According to Herr and Anderson [37], teachers who participated in action research, and attended workshops and seminars, did not appear to change or enrich their educational practices. Even in the present research, the participant teachers had been trained two years prior to PAR in the mosaic approach, but they did not notice any change in their teaching practices, nor did they clearly remember the context of the approach. This proves that simply providing experiences using examples and teaching materials is not enough. During PAR, we conducted hands-on workshops and meetings at different time points, and our aim was for the group to have constant access to the theoretical framework and, through their interaction, based on experiential activities, to explore, analyse, and capture the “problem” and their concerns. The workshops also seemed to support team dynamics and the development of collaborative relationships among the participants. Three years after PAR, teachers still recall how the hands-on workshops and the meeting empowered them to search for answers and solutions to their concerns.

“The hands-on workshops and seminars helped me a lot to gain a valuable framework and understand methods that support children’s learning outdoors. It also helped me to look for ideas and answers in a global network since here in Greece we don’t have a supportive governmental framework.” T2

“…from the moment we did something together with children and observed it outside the predetermined environment of the classroom, I felt that my knowledge was invalidated. Many things that children observed and asked were unknown. This made me read more and get informed based on the emerging children’s interests. The investigative way of thinking empowers children and they learn as they wish and in their own time and so do us.” T1

We observed that during their interviews, the teacher mentioned many times the way that they now work as a team. During PAR, as mentioned above, we used different tools from the mosaic approach with the adults, and we adopted values of empowerment, collaboration, and collective meaning making for nine months. This approach appeared to help them co-build a school culture that embraces the outdoors. However, it was a group concern that the PAR should have lasted longer than an academic year.

“During the research we observed all the benefits and valuable learning experiences that kids had through these activities and we tried as a team not to let our fear becomes an obstacle.” T3

“The research changed our perception of OPL and it worked as a catalyst. It influenced our culture, helped us stand in our feet and work as a team.” T4

“…maybe we needed more time, because it is a project that the more time you give, the more it pays off for the children, and especially for us teachers. We all had a great time especially the kids.” T1

“Clearly, our participation has benefited us and the children a lot. We now have phone support (with the researcher), so whatever comes up we are in communication, we talk and we gladly exchange ideas. However, we would love to have you visit us again and continue some of our plans.” T2

Several researchers have raised concerns regarding EC teachers’ competence in recognizing and fully facilitating the learning possibilities available outdoors [10,35]. It is worth mentioning that while the Greek context (Early Years Curriculum, teachers training, educational culture) does not support teachers and schools’ efforts to enhance learning and play outdoors, the participants’ teachers, after the PAR ended, wished to spread their knowledge and experience to the wider Greek school community. For this reason, the teachers from SU1 presented to all the schools in their district the process of transforming their outdoor school environment while actively engaging the children. They also wrote and presented at a Conference an article on how they promoted parental involvement during PAR in order to improve the quality of children’s playing and learning outdoors.
3.3. Physical Environment

During PAR, in order to empower teachers to reflect critically on their practices and habits, we frequently discussed, in open dialogues both in individual and group meetings, their concerns and insecurities, and they also had open access to the researcher’s field notes in order to self-reflect. In this process, the participation of the school counsellor and the consulting architect was of great value for teachers. The school advisor acted as a confirmation for teachers’ scientific approaches and the architect as a consultant on their design attempts to provide the desired security outdoors. Teachers’ main concerns were to enrich the inelastic and stereotypical school design and mostly to increase safety. Central to the analysis during PAR were the contradictions that arise around safety, protection, and adult-centered structured environments versus children’s risky, “dirty” play and autonomy in outdoor environments.

Three years later, our observations combined with the interviews show that natural elements are now valued as vital components in learning activities since they are perceived (by the teachers) as fields of observations and experiments.

However, in SU1, the outdoor place that was then chosen to be transformed on the basis of children’s needs and the fact that it provided more “soft” and natural elements is now a forbidden area. As described below, the municipality considers this space dangerous because of the constant changes happening, mainly because of the different weather conditions creating ponds. The place that was carefully chosen by all the members of the school community (teachers, the school counsellor, parents, children) as the most appropriate place to host their everyday outdoor activities and was collectively transformed by embedding social, cultural, and personal factors is now a place that cannot be used due to bureaucratic top-down decisions.

“Immediately after the research, we took advantage of the rainwater, bought wellies, did experiments and we played there (rain pod). We put our hands and feet in. We used what nature offered us. But now we do not access this place, it was forbidden by the municipality as dangerous. So in essence, when you have an outdoor environment which someone always limits its features/opportunities then you get disappointed.” T2

During the last steps of PAR in SU2, the municipality, appreciating the collective effort and the results both in pedagogical and structural terms, was committed to further supporting the school in creating a safer outdoor environment by removing the inappropriate iron structures from the schoolyard and financially supporting the school’s design plan. However, three years later, nothing has been accomplished, and the municipality’s support is absent.

“if we could solve this part (the weakness of the physical environment) then we would consciously spend more time in the yard.” T3

“There is a lack of financial resources. There is willingness but no money.” T4

“Clearly, our participation (in PAR) has benefited us and the children and we would like to put into practice what was originally planned but yet many problems haven’t found their solution due to the financial problems.” T3

“We had agreed at the beginning of the research to orientate the process of transformation on collective decisions and we did not care so much about outcome or viability of the settings. I did not feel that our efforts were thwarted because we found other ways. The one thing we just can’t not replace is the natural part and this is what we ask from the municipality!!” T2

In both cases, schools did not receive any support from the local community and municipality, and there are still some concerns around safety issues. In the relevant OL literature, Beames and Brown [38] described the value of providing students with “serendipitous learning opportunities … where not everything is predictable and measurable” (p. 129). Unfortunately, this approach can be difficult to adopt in our cases because in SU1, the natural elements that provide all these opportunities were significantly decreased, and in SU2, the outdoor school environment is not maintained appropriately. Thus, teachers frequently feel the need to regulate authentic opportunities that may provoke mixed
feelings/conditions. The concern raised here regarding outdoor play spaces and their quality is also supported by recent research findings where both Greek parents and ECEC practitioners strongly referred to a lack of play spaces (74.3% and 50%, respectively) and poor play facilities (80% and 50%, respectively) as barriers to children’s outside play [4].

Interestingly, during interviews with teachers, despite all the difficulties they are facing in terms of the physical environment, they seem to feel empowered to plan their next moves to meet their needs. They seem ready to influence decision-making about how and what their physical spaces should become [20].

“Our voice, however, was heard substantially and not superficially. Since the municipality promised to hire a landscape architect that will help us rebuild the back part of the schoolyard where the garden and all the natural elements are.” T4

“Changes in spaces are definitely combined with changes in practices, so after our collaboration and the changes we made, we are always trying to spend more time outdoors and always looking for ways to make the outdoor environment more interesting for children.” T4

Figure 1. The outdoor school environment of SU1 throughout the last four years.
Figure 2. The outdoor school environment of SU2 throughout the last four years.

4. Discussion

The research presented here provides insights on how two mainstream schools tried to accommodate OPL practices in their settings after participating in a PAR at a time when communicating the value, effectiveness, and applicability of OL in all spectrums of schools is under debate. When PAR started, teachers had target-oriented goals, hoping for an improved outdoor physical environment. However, during their active participation in the research, they were witnesses of and the main characters in a bigger and more meaningful change. The school community moved beyond the transformation of physical space to include social change.

PAR as a methodology is based on the assumption that people are social beings and that knowledge is socially created through a constructivist approach [39]. When conducting a PAR, we believe that knowledge is based on the experiences and lives of individuals and that knowledge is created through authentic collaboration between the researcher and participants [40]. PAR embraces values such as empowerment, collaborative relationships, and learning. In an educational setting, Dewey [41] states that often the teacher has more to learn than to teach. One of the ways to facilitate this is through a more collaborative, democratic learning environment, which will benefit both teachers and students. Based on the above and through our experience participating in the present research, we (teachers and the researcher) felt that the methodology of PAR and the philosophy of OL share many common values that helped us and made it easier to head towards a clearer conception of OL approach and practices in response to the school settings.

We believe that the variety of the practices and methodological instruments (e.g., individual interviews, group interviews, workshops based on participants' ideas and preferences, drawings, walking tours, photographs, magic carpet, and role-playing) that were adopted during PAR in order to actively engage all the member of the school community acted as a first-hand experience for the teachers to illustrate and expand their pedagogic knowledge of specific strategies for knowing students and how they learn, knowing the content and how to teach it, and planning for and implementing effective teaching and learning based on their needs [12] (215). Moreover, the role of the researcher, who had a constant presence in schools, consulting, supporting, and participating in all the processes as needed, not just sharing her knowledge, was to act as a role model and give insight into how teachers act as guides and facilitators when outdoors [42].

As Potter mentions [2], the lack of a clear context on the OL pedagogies, principles, and orientation may shake the sense of comfort and stability; however, three years after the PAR ended, the participant teachers seem to have significantly enhanced the time spent outdoor, feeling comfortable to demonstrate a fluid movement across and between constructivist and socio-constructivist strategies and behaviourist teaching and learning strategies in order to facilitate children's need and their own concerns. Most importantly, teachers escaped from the linear process of teaching and communicating with children outdoors and slowed down the pedagogical pace, when needed, questioning the assessment-driven teaching and learning models.

Teachers, after their participation in PAR, purposefully try to give children much freedom when spending time outside, and, as adults, they try to support children's spontaneous motivation, excitement, and questioning [43]. Mawson's study [35] of children's play in nature and their interactions with teachers illustrates how applying a variety of pedagogical strategies ranging from free play to teacher's directed activities may provide children with a greater chance to utilize the affordances of an environment than using only one pedagogical strategy. Teachers' experiences after their participation in PAR seem to align with the idea that learning is seen as taking place during children's play, as well as in more organized situations, and that children's right to participation is seen as important in the educational activities (Norwegian Ministry of Education and Research, 2015 in Skarstein & Ugelstad, 2020, p. 933)
Despite being one of the teachers’ goals after finishing PAR, sustaining an active network and communication with the local community and authorities was difficult to achieve since Greek culture seems to underestimate the value of OL. However, despite all the difficulties teachers face in terms of the physical environment, they feel empowered to plan their next moves to meet their needs. They seem ready to influence decision-making about how and what their physical spaces should become [20]. Additionally, they are keen to share their knowledge and experience and make it visible to the Greek educational community.

The current research points out the importance of engaging all of the school community in our effort to integrate outdoor learning and play into the school’s everyday life. All the members of the school community should be empowered to acknowledge their right to choose an active role in making decisions that affect them. We are now more interested in the process that would help us not only to transform the outdoor design but at the same time commit all the school members and especially the adults to a process that requires changes in well-established educational approaches and habits. Potter [2] wonders: does OL have a clear worldview or paradigm that defines the way in which it sees the world? Does OL have active research or theory development agenda? We hope this article contributes to the global discussions regarding the value, effectiveness, and applicability of OPL in all spectrums of schools.

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