

MoVimparo. Twelve years of action research at a kindergarten: 2008–2020

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Abstract

MoVimparo is a MEMO (Modena Educational Multicenter “Sergio Neri”) website. Memo is a structure of the Educational Services Sector of the Municipality of Modena, recognized as a Service and Consultancy Center for the educational infancy institutions of Emilia Romagna Region (DGR n.262/2010 as amended by DGR n.2185/2010). This educational multicenter is also accredited by the Ministry of Education (MIUR) for the training of school staff, refers to the Ministerial Directive n.170/2016. This article has analyzed seventy-three educational projects through the narrative synthesis approach, derived from the qualitative analysis of the focus group reports (Oprandi, 2001; Cataldi, 2009), and based on the following steps: a) determination of the aim - extrapolation of general didactic guidelines useful to outline applicable good practices for an educational project in outdoor education; b) identification of the relevant parts of the projects analyzed with respect to the purpose of the research; c) classification of categories referring to the relevant parts of the text; d) identification of the characteristic elements of the individual categories; e) summary of good educational practices. The teachers have shown that they know how to get involved and measure themselves with the daily work tools that they have highlighted in four main elements: a) *teaching approach*, b) *methodology*, c) *characteristics of the setting*, d) *partnership*. These four elements, deduced from the project’s analysis, underline an educational approach centered on the child and on his needs. Active and open didactics, spaces prepared in structured and unstructured forms, various materials, are always organized and combined by the adult to give space to the spontaneous action of the child. In this sense, outdoor education represents a winning strategy for teachers, thanks to its great operational adaptability of teaching. Each teacher, observing their children, can carry out educational projects appropriate to his/her school, to the spaces and times available, being able to give children great operational freedom without losing sight of the educational objectives of the school.

Keywords: MoVimparo, Infancy, Outdoor education, Teachers-Projects

Introduction

A decade of preschool teachers training, in the field of the body and movement experience, in the Municipality of Modena (North-East of Italy), has produced an important change in the main actors of the context considered: educators, teachers, pedagogical coordinators, parents and, of course, children. The openness to the current needs of childhood has prompted teachers to reconsider their educational relationship, especially increasing the trust granted to the child, with respect to his or her competence to act in the exploration of the surrounding environment, within safe contexts.

Teachers and parents have shown more awareness and attention to education through the body and movement, even in the daily use of outdoor spaces. An innovative way to teaching that has overcome unjustified resistance and resolved stereotypes and limiting attitudes: fear that children will get hurt, transition from a structured approach to a more open and active one, perception of body-movement as a fundamental aspect of educational action, rediscovery of the school garden as a third educator according to Malaguzzi’s approach (Brown, 2020; Torquati et al., 2013). An educational environment in which children’s learning through intrinsic motivation (pleasure), interest, concentration, fascination and autonomy (Montessori, 1973, p.37).

Many meetings and workshops were held with parents, organized by the Municipality of Modena or by schools, to involve them in this educational evolution. Fathers and mothers, initially doubtful, now appreciate the progress made and believe that outdoor education is an important experience for the development of their children. In this context, children can express themselves with greater resourcefulness and creativity.

Overall, this more confident approach to children’s autonomy and sense of responsibility created a positive loop that strengthened teachers’ attitudes and reduced their anxieties and fears towards experiences involving movement and the body, especially in outdoor learning. This atmosphere of mutual trust has improved teacher-learner interaction, giving shape to many projects conceived and realized by playing and working outdoors (Ceciliani, 2015). These experiences, based on the sensorimotor dimension (Oliverio, 2011), have expanded from the school garden to the neighbourhood or natural parks, educational farms, and so on. Children,

teachers and parents are now united by an educational approach based on the belief that movement and action, in space and with space, means developing the mind (Oliverio, 2017) and the entire abilities of each child (Monti et al., 2017).

The article presents the analysis of seventy-three educational projects, located on the MoVimparo website (<http://memoesperienze.comune.modena.it/movimparo/index.html>), carried out in the nursery and infancy school, produced thanks to the training action, aimed at teachers, on the issue of the body, movement and outdoor education. From these experiences, often carried out as action research, indications, good practices and guidelines emerge for an active and engaging teaching-learning experience. In particular, the projects highlight the teachers' attention to aspects considered crucial: the observation of children, sensorimotor experiences, challenging situations for children (pedagogical risk), the importance of the educational process and not just of the result.

Overall, the didactic approach emphasizes the importance of the setting, its spaces, its times, the involvement of parents, integrated into a global action oriented towards a fundamental objective: the centrality of the child and his needs in the educational process.

The analysis of the various projects highlighted some transversal practices, implemented by the majority of teachers, which clearly define some guidelines that anyone can follow for a correct approach to an education that takes place in the external environment and not only in the internal one. The teachers have shown that they know how to change their way of educational approach, their way of seeing the external environment as an educational framework and not just as a space for recreation.

The greater autonomy of the children, their greater well-being in both outdoor and indoor environment, have convinced the majority of teachers and parents to change their way of considering educational spaces and times.

The purpose of the analysis is to verify the general educational lines that emerged in the projects and to outline good practices that, beyond the characteristics referred to the single project, can be taken as a basic design for projects related to the body and movement in outdoor learning. In particular, the good practices that emerged from the analysis, place all the didactic aspects carried out, in four fundamental frameworks: *teaching approach, methodology, characteristics of the setting, parents' partnership*.

These good practices, summarized in a specific table and detailed in the contribution, represent a general model of outdoor education that every educator or teacher can use to plan their own educational path. Furthermore, these guidelines, due to their transversal nature, can be adapted and modelled to one's situation in relation to the age of the children, the outdoor spaces and the tools available.

Materials and methods

MoVimparo is a MEMO (Modena Educational Multi-centre "Sergio Neri") website. Memo is a structure of the Educational Services Sector of the Municipality of Modena, recognized as a Service and Consultancy Center for the educational infancy institutions of Emilia Romagna Region (DGR n.262/2010 as amended by DGR n.2185/2010). This educational multi-centre is also accredited by the Ministry of Education (MIUR) for the training of school staff, refers to the Ministerial Directive n.170/2016.

MoVimparo website (<https://memoesperienze.comune.modena.it/movimparo/index.html>) presents a form of documentation usual for the schools of the Municipality of Modena and contains characteristic elements. It proposes a hypertextual system that returns a reticular and non-sequential view of the contents, to ensure that everyone can choose a personal reading path. It places the didactic experiences within the theoretical framework of training references for educators and teachers, supporting the reflection, the personal re-elaboration and self-learning.

The menu consists of six items. What it is: information about the site. Five thematic frames in which the educational projects are placed: Outdoor Education, Perception, Challenge, Creativity and Play. Each frame contains sub-items in which the educational projects are placed that can be viewed and downloaded (in Italian and some also in English).

Currently, there are about eighty educational projects, experiences carried out in nurseries and preschool, visible in the form of flipbooks and downloadable as PDF. Every single project, the product of many years of action-research experimentation in the school, is described through appropriate and complete documentation (images, aims and didactic processes, tools, children's verbalizations, results).

This article has analysed seventy-three educational projects through the narrative synthesis approach, derived from the qualitative analysis of the focus group reports (Oprandi, 2001; Cataldi, 2009), and based on the following steps:

- a) determination of the aim - extrapolation of general didactic guidelines useful to outline applicable good practices for an educational project in outdoor education;
- b) identification of the relevant parts of the projects analysed with respect to the purpose of the research;
- c) classification of categories referring to the relevant parts of the text;
- d) identification of the characteristic elements of the individual categories; e) summary of good educational practices.

First phase: for each project the analysis, based on the following previous steps, was carried out independently by two different researchers.

Second phase: at the end of the first phase, the researchers compared the results obtained to both the common and discordant data.

Third phase: a second check was carried out on the discordant data, only applied on some projects, to confirm agreed elements or eliminate them if ambiguous.

Fourth phase: compilation of a summary sheet of the collected data.

Results and discussion

The analysis conducted (Fig.1) highlighted *four* main frameworks:

a) *Educational approach.* In this framework, we find elements referable to the teachers-learners educational relationship. In particular, teachers are willing to be more flexible to satisfy the needs of children and their intuitions, to give them more trust and responsibility in educational experiences, to value the educational process more than the results. In other words, the approach that emerged characterizes and open-adaptable educational design, more willing to be realized in an open environment.

b) *The preference for the sensorimotor characterization of educational proposals.* An approach in which body and movement become keystones in all activities, according to an embodiment theory in which action and cognition are parts of a single and unitary intelligent process of adaptation and learning (Scott et al. 2017). The teachers also seem to be open to the pedagogy of risk (Lang, 1998; Russel, 2007), to support children in their proximal development zone (Vygotskij, 1974) in order to support the self-perception and self-efficacy: a sense of the limit and responsibility, risk as a resource to help and cooperate (peer teaching), the cognitive function of control and inhibition. Children do exactly what their body allow them to do, they never risk beyond the possible if they are not stressed by adults.

c) *Methodology.* In this frame, the teachers indicate the fundamental strategies used, in particular, related to open didactic situations: free exploration, guided discovery, problem-solving, peer teaching and deliberate activities (Coté & Hay, 2002).

The fundamental characteristic of the pedagogical action, emerging from the analysis of the projects, is the predisposition of various educational frameworks in which to let the child free to explore the environment and objects. Free exploration in suitably prepared didactic contexts facilitates individual sensorimotor involvement (Roessingh & Bence, 2018, p.31) and respect the needs of each child. On the other hand, nothing can be conscious if it does not pass through personal emotive experience, guaranteed by the personal approach to the environment and objects. The child free to act on the environment, through the action of his own body learns to regulate himself, develops one of the first cognitive function: motor and behavioural inhibition (Diamond, 2007; Barker and Munakata, 2015).

d) *Setting characteristics.* The educational activity is supported by appropriate preparation of the didactic setting. This is the Montessorian principle of the “prepared environment” (Phillips and Daze, 2018, p.2) in which the learning setting allows the children to use their body, action and intelligence, in autonomous learning. In this approach, education does not mean learning by listening to words but acting on the environment and objects as a centre of attention-concentration-action. This setting presents the same principles of the deliberate play of Cote and Hay (2002), in which the adult prepares the educational framework but then leaves the child free to act. In this way, without losing sight of the educational objectives, nothing is imposed on the child. In this context, the fundamental elements that emerged from the projects were basically two: space and time. Within the reflections on space, we will see, also objects and furnishings were contemplated.

Teachers consider the school courtyard as the main space for Outdoor Education. This space, in fact, can be used daily in all schools, including those in urban areas, far from public parks or natural woods. This is very interesting because it demonstrates the recognized importance of outdoor education and the possibility of realizing it every day in the spaces that the school can guarantee. Space in our conception, therefore, is the environment that surrounds the school (Higgins and Nicol, 2002) and that can be used in the normal educational curriculum. Very few schools border with a forest or a natural park, and only these can identify Outdoor Education as a school in the woods. If there is no possibility of using a space every day, such as a natural park, it means that outdoor education would be carried out occasionally and not in daily activities. Occasionality cannot be considered an educational practice but only a small part of it such as, for example, two or three trips a year to visit an educational farm or a wood. For this reason, it is interesting that the teachers indicated the schoolyard as the basic place for outdoor education. It is important because it means that teachers consider the outdoor activity as a fundamental aspect of their educational project.

Partnership. The main collaboration declared by the teachers is with the parents. Fathers and mothers met during training and focus groups, have become supporters of outdoor activities. Overcome the initial fears about the health and safety of children, they support the teachers' initiatives, both in school activities and in educational trips during the school year.

The educational triangle, teachers-children-parents (Ceciliani, 2016, p. 51) has become the concrete expression of the school-family educational alliance.

Categories referring to the relevant parts of the Educational Approach (Figure 1)

a) observation of children. Teachers find it important to observe children, to understand their needs, understand which activities are most motivating for them, follow their intuitions, understand their abilities and skills, see how they solve problems. This didactic approach to observation means having humility and patience, it also means opening to an educational model centred on the child's action rather than on the adult's action. Finally, it means reflecting and guiding children to become active citizens of a better world (Atli et al, 2016, p.128).

b) Importance of the educational process. The attention declared by the teachers on the educational process is an important pedagogical concept. It is during the concrete activity that the educational conditions are realized and not in the final result. While acting, exploring, solving problems, the child experiences himself and his abilities: self-determination, self-control, commitment, skills, creativity, collaboration with others, decision and evaluation (Rathunde, 2019). The quality of the educational action is realized in the process, not in the final result which is a consequence of it.

c) Sensorimotor involvement. The teachers stressed the importance of the child's sensorimotor involvement. Indeed, as research seems to indicate, mental activity is influenced by sensory and motor systems, including, of course, the body and action (Glenberg, 2010, p. 586). According to the theories of embodied cognition, motor action is an essential factor in the intellectual development of children. Through the movement, they know external reality and construct abstract ideas (Montessori, 1966, p.36). In other words, the motor system affects cognition, just as the mind affects the actions of the body.

d) Risk pedagogy. In this category, the teachers recognized the importance of accompanying children in their proximal development zone through activities at the limit of their abilities and skills. Thanks to these activities the teachers were able to observe two fundamental shreds of evidence: children do exactly what their body allow them to do;

children never risk more than they can if they are not stressed by adults. These activities help children build a sense of limitation and the concept of responsibility. They also develop mutual help and peer teaching. Obviously, these educational proposals are made thanks to a series of rules which, while allowing children to test themselves, guarantee safe experiences, far from the real danger. On the other hand, risk education is necessary as there are no zero-risk situations in everyday life (Russell, 2007).

Methodology.

The analysis of the projects highlighted an approach in which the child is the protagonist of the didactic action and the teacher is his attentive and loving assistant. This approach identifies a teacher who engages the child in the practical action of learning and, at the same time, engages in this embodied practice. When this does not happen, research recognizes an educational disadvantage (Atli, 2016, p.132). The didactic strategy, therefore, helps the child to use his spontaneous movement without imposing arbitrary tasks (Montessori, 1964, p.88). The didactic approach declared by the teachers, in the various projects, has cultivated and encouraged the free movement of the child, recognizing in it the expression of his interiority and personality. The authority of the adult was used only to determine the rules to ensure safety for the child. This authority, in order not to hinder the child's action, has been exercised through the provision of prepared or deliberate settings: definition of a framework of rules within which the child is free to act in a safe context. In this way, the child's interests are protected and his motivation and concentration in activities are guaranteed (Marshall, 2017).

Setting characteristics.

The categories that emerged in the educational approach are:

a) Space. The fundamental space for outdoor education, as previously stated by teachers, is the schoolyard where, every day, it is possible to carry out activities, even when the weather is not optimal. In fact, in the Modena schools, parents provide raincoats and waterproof boots, to allow children to go out even in the rain or snow. The educational projects, mainly carried out in the schoolyard, also include leaving the school to explore other environments: the neighbourhood, the public parks, the natural parks or woods, the educational farms, the educational journey. These non-daily activities take place several times a year as a corollary to the main project. According to the Montessori concept of the prepared environment (Phillips and Daze, 2018, p.2), from time to time the teachers modify the schoolyard to deconstruct it by eliminating all toys or artificial objects and preventing the use of fixed furnishings (swings, slides, tunnels, etc.). In this way, they offer to the child an environment that is as natural as possible. In other words, teachers alternate days in which the schoolyard is structured with days in which it is unstructured. In this way, they solicit the prevalent use of gross motor skills (unstructured environment) or fine motor skills (structured environment) in children (Ceciliani & Bortolotti, 2013, p. 77)

b) Time. Regarding the time, the teachers have shown a greater willingness to respect the times of the children. According to Barker (2012) no more rush, the frenzy to achieve results, but give more time to the children. Teachers say they have become more flexible and willing to trust children and their work more. According to this approach, teachers have dedicated more time to the relationship with the children, to listen to them through different tools: briefing and debriefing, circle time, verbalizations. In other words, time to talk, reflect together and re-elaborate experiences. Over time, these educational listening actions have led to the

creation of a virtuous loop that combined outdoor, more sensorimotor, activities, with indoor, more reflective and reworking activities (Ceciliani, 2018, p.171). Such work inspired a continuous-time between outdoor and indoor activities.

Partnership.

Parents involvement. As highlighted above, the teachers have worked year after year, even with parents, in the search for an educational alliance. The educators, strong in their convictions on outdoor education, have worked to include fathers and mothers in the educational action aimed at their children. The initial fears of the parents, concerning the health and safety of their children, turned into sharing and participation when they saw the results of outdoor education on their children, especially in their more controlled, relaxed behaviour at home. Over the years, parents have also realized that their children got sick less, they were healthier, stronger. This evidence was also supported by some meetings organized between parents' representatives and paediatricians. Over time, therefore, parents have assumed their role as co-educators for the functions required of them: participation, facilitation, support and assistance.

Characteristic elements of the individual categories in the Educational Approach.

a) *Observation of children:* understand their needs, understand which activities are most motivating for them, follow their intuitions, understand their abilities and skills, see how they solve problems.

b) *Importance of the educational process:* exploration, solving problems, self-determination, self-control, commitment, skills, creativity, collaboration with others, decision and evaluation.

c) *Sensorimotor involvement:* body and action, movement and construction of abstract ideas, embodied education, d) *Risk pedagogy:* (playing the challenge/risk, rules, zone of proximal development, sense of limit and responsibility, risk as a collaborative resource, peer teaching.

Characteristic elements of the individual categories in the Methodology.

Oriented environments (prepared environment), open learning strategies (free exploration, guided discovery, deliberate activities, problem-solving, peer teaching), materials (natural, recycled, improvised, ...), modification of the schoolyard (structured and unstructured), modification of daily routines (only from 4 to 6 years old), didactic flexibility, open projects.

Characteristic elements of the individual categories in the Settings characteristics.

Space (schoolyard every day, neighbourhood, urban district, natural park and woods (sometimes), structured and unstructured).

f) *Time:* slow time, children's response time, circle time, briefing and debriefing, verbalizing and reflecting together, reworking, continuous-time indoor and outdoor.

Characteristic elements of the individual categories in the Partnership.

Involvement of parents (educational alliance, parents-teachers, educational triangle, teachers-children-parents). The active role of parents: support, participation, facilitation, assistance.

Figure 1 – Analysis of data results

Relevant parts	Categories	Characteristic elements
Educational approach	Observation of children	Understand their needs; understand which activities are most motivating for them; follow their intuitions; understand their abilities and skills; see how they solve the problem
	Importance of the educational process	Exploration, solving problems, self-determination, self-control, commitment, skills, creativity, collaboration with others, decision and evaluation.
	Sensorimotor involvement	Body and action, Movement and construction of abstract ideas, Embodied education
	Risk pedagogy	Playing the challenge/risk, rules, a zone of proximal development, sense of limit and responsibilities as a collaborative resource/peer teaching
Methodology	Child centred education	Open learning strategies (free exploration, guided discovery, deliberate activities, problem-solving, peer teaching) - Materials (natural, recycled, improvised, ...) –Modification of daily routines (only from 4 to 6 years old) – Didactic flexibility - Open projects.
Setting characteristics	Spaces	Schoolyard every day, neighbourhood, urban district, natural park and woods (sometimes), structured and unstructured environment.
	Time	Slow Time - Children's Response Time - Circle Time - Briefing and Debriefing -Verbalizing and reflecting together - Reworking - Continuous-time in the indoor/outdoorloop
Partnerships	Parents involvement	Educational Alliance (parents-teachers), educational triangle (teachers-children-parents), active role of the parents (support, participation, facilitation, assistance)

Conclusion

The analysis of the seventy-three educational projects of the MoVimparo website (<https://memoesperienze.comune.modena.it/movimparo/index.html>) has outlined a series of general guidelines that each teacher can adapt to the outdoor education projects designed for their groups of children.

With reference to the extrapolation of the relevant parts, their characteristics and the elements that make up the analysed projects, an interesting pedagogical picture emerges, especially since it is built on the basis of real educational activities carried out in a decade of preschool activity.

The teachers have shown that they know how to get involved and measure themselves with the daily work tools that they have highlighted in four main elements: a) *teaching approach*, b) *methodology*, c) *characteristics of the setting*, d) *partnership*.

These four elements deduced from the project's analysis, underline an educational approach centred on the child and on his needs. Active and open didactics, spaces prepared in structured and unstructured forms, various materials, are always organized and combined by the adult to give space to the spontaneous action of the child, as in the last century hypothesized Maria Montessori:

It is true that the child develops in his environment through activity itself, but he needs material means, guidance and an indispensable understanding. It is the adult who provides these necessities. . . . If [the adult] does less than is necessary, the child cannot act meaningfully, and if he does more than is necessary, he imposes himself upon the child, extinguishing [the child's] creative impulses. (Montessori, 1956, p.154)

In this sense, outdoor education represents a winning strategy for teachers, thanks to its great operational adaptability of teaching. Each teacher, observing their children, can carry out educational projects appropriate to his/her school, to the spaces and times available, being able to give children great operational freedom without losing sight of the educational objectives of the school.

Finally, the data reported showed how outdoor education has also involved parents who, over time, have shared and supported this educational model.

This work asks for a pedagogy that offers a correct design of an environment in which the child can work spontaneously with concentration, commitment, joy and satisfaction. Almost a great play, that characterizes every child guided by an adult to act with freedom and responsibility (Cossentino, 2006, p.66).

Author contributions

C.A.: Conceptualization, Methodology, Data curation, Writing-Review & Editing, and Supervision.

B.A.: Conceptualization, Investigation, Formal Analysis, Writing-Original Draft Preparation.

T.P.: Writing-Review & Editing, and Supervision.

All authors have read and agreed to the published version of the manuscript and declare that they do not have conflicts of interest.

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