**Artigo**

# Creativity and Early Childhood Education: studies and research in Italian ECEC contexts

## Criatividade e educação infantil: estudos e pesquisas em contextos italianos de educação pré-escolar

## Creatividad y educación infantil: estudios e investigaciones en contextos educativos pre escolares e infantiles italianos.

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**Abstract**
Promoting creativity in early childhood education does not only mean encouraging the development of an important capacity for present and future life, but also implies recognizing and assigning value to each child's subjectivity, giving space and attention to his ideas, his judgments and his original processes of learning. In this sense, thinking, promoting and making creativity visible constitutes, from a collaborative and participatory research perspective, three significant keywords of interrelated research areas that allow to study the theme of education to creativity in early childhood. Thinking about creativity refers to the importance of exploring both the ideas of creativity suggested in academic literature, which widen or reduce the definition of such concept through nuances and connotations, and the opinions and representations of teachers and educators. Promoting creativity refers to the examination of more strictly operative aspects, both in terms of the organization of space, materials, time settings and groups, and in terms of the teacher's role in facilitating and supporting the development of creative processes. Making creativity visible, finally, is about examining the creative processes of children. In this case, it's about documenting and analysing systematically how children can be creative in different situations and which are the manifestations of their creative thinking.

**Resumo**
Promover a criatividade na educação infantil não significa apenas estimular o desenvolvimento de uma importante capacidade para a vida presente e futura, mas também implica reconhecer e valorizar a subjetividade de cada criança, dando espaço e atenção às suas ideias, aos seus julgamentos e aos seus processos originais de aprendizado. Neste sentido, pensar, promover e tornar visível a criatividade constitui,

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numa perspectiva de investigação colaborativa e participativa, três palavras-chave significativas de áreas de investigação inter-relacionadas que permitem estudar a temática da educação para a criatividade na primeira infância. Pensar a criatividade refere-se à importância de explorar tanto as ideias de criatividade sugeridas na literatura acadêmica, que ampliam ou reduzem a definição de tal conceito por meio de nuances e conotações, quanto às opiniões e representações de professores e educadores. A promoção da criatividade refere-se ao exame de aspectos mais estritamente operativos, tanto ao nível da organização do espaço, dos materiais, dos tempos e dos grupos, como ao nível do papel do professor na facilitação e apoio ao desenvolvimento de processos criativos. Tornar visível a criatividade, por fim, consiste em examinar os processos criativos das crianças. Neste caso, trata-se de documentar e analisar sistematicamente como as crianças podem ser criativas em diferentes situações e quais são as manifestações do seu pensamento criativo.

**Resumen**
Promover la creatividad en la educación infantil no sólo significa fomentar el desarrollo de una importante capacidad para la vida presente y futura, sino que también implica reconocer y valorar la subjetividad de cada niño, dando espacio y atención a sus ideas, sus juicios y sus procesos originales de aprendiendo. En este sentido, pensar, promover y visibilizar la creatividad constituyen, desde una perspectiva de investigación colaborativa y participativa, tres palabras clave significativas de áreas de investigación interrelacionadas que permiten estudiar el tema de la educación a la creatividad en la primera infancia. Pensar la creatividad refiere a la importancia de explorar tanto las ideas de creatividad sugeridas en la literatura académica, que amplían o reducen la definición de tal concepto a través de matices y connotaciones, como las opiniones y representaciones de docentes y educadores. La promoción de la creatividad se refiere al examen de aspectos más estrictamente operativos, tanto en términos de organización de espacios, materiales, tiempos y grupos, como en términos del papel del docente como facilitador y apoyo al desarrollo de los procesos creativos. Visibilizar la creatividad, por último, se trata de examinar los procesos creativos de los niños. En este caso se trata de documentar y analizar sistemáticamente cómo los niños pueden ser creativos en diferentes situaciones y cuáles son las manifestaciones de su pensamiento creativo.

## 1. Introduction

Promoting an *educational culture for creativity* (Jeffrey e Craft, 2004) in early childhood education contexts means enhancing an inclusive approach to pedagogy, that is, an approach in which children and adults participate together in activities and processes of exploration and discovery, identifying problems, asking questions, reflecting and experimenting with solutions. In this sense, a truly inclusive pedagogy of the child promotes his imaginative engagement with problems and the *possibility thinking* (Cremin et al., 2006)*.

It is therefore an approach that gives value to children's experience and capacity for imagination, encouraging their active involvement in the processo f research and construction of knowledge by supporting their reasoning about "what could be" and "what could be done" (Jeffrey, Craft, 2004). Respect for children's ideas, their protagonism in the decision-making process, the possibility of their control of the learning process as well as the promotion of dialogue, flexibility and playful exploration are all essential ingredientes of a pedagogy of creativity in schools and preschools (Craft et al., 2014).

In this sense, the various research projects that we have developed in the italian context, which have adopted a collaborative and participatory research perspective and which will be referred here briefly, even if not in a systematic way, have aimed both to explore the ideas and representations of creativity of teachers (*Thinking about creativity*), both to analyze the operational approaches and strategies with which children's creative processes are promoted and supported in educational contexts (*Promoting creativity*), and, finally, to examine children's creative processes, systematically documenting and analyzing how children can be creative in different situations and what are the manifestations of their creative thinking (*Making creativity visible*).

## 2. Thinking about creativity

Despite the numerous attempts that research in various fields has made to define what creative thinking is and to univocally identify the characteristics of this process, creativity appears, however, as a constructo that is difficult to define, with an ambíguos meaning and therefore open to interpretation, a concept "with fuzzy contours" (Wittgenstein, 1953-1967, p.49). If it is true that it seems difficult to clearly determine what creativity is, one can on the other hand ask: "is it always possible to advantageously replace a blurry imagine with a clear one? Isn't the blurry image often what we need?" (ibidem). Wittgenstein's questions, which not surprisingly focus on the concept of play, an elemento that has close links with the topic of creativity, suggest that to approach the last one, especially in the educational context, it is necessary to problematize and keep open the definitions we refer to are open and flexible, as it can help to grasp the changing aspects of a phenomenon that appears multifaceted and complex.

But defining a boundary and contours, however imprecise, to a concept can also be a way, albeit temporary, of starting a discussion for a specific purpose, of making that concept usable for a particular aim. In this sense, dealing with creativity education in preschool contexts implies the need to circumscribe what is meant by creativity, to avoid conceiving it as something that pervasively caracterizes the words and daily actions of children and to try to make it, therefore, an object of analysis and reflection that can help the project culture in the educational field grow.

We therefore want to refer to a definition of creativity, quite shared in the pedagogical and psychological fields, which interprets it as "the ability to produce

something new (original, unexpected) and, at the same time, appropriate so that the result satisfies the requirements and limits of the task" (Kaufman, Baer, 2004, cited in Andiliou, Murphy, 2010, p.203). A definition that highlights how in the truly creative act the elemento of novelty and originality, i.e. the ability to express new ideas and recognize unsual connections between thoughts and objects, must be integrated with that of suitability for the task or activity implied, of the usefulness and effectiveness of the gesture or the proposed solution. Originality then representes a necessary but not sufficient condition for creativity, which presupposes an original and useful interpretation of experience (Runco, 2008). Children, for example, produce many original ideas, in the sense that they are unusual or new ideas compared to what they have previously produced or by their peer group, ideas which however may be original but not always creative. In fact, ideas, inventions, intuitions or creative solutions must also be in some way effective, appropriate, suitable or useful and this implies the ability to direct thought and action towards some objective (ivi).

A conception of this type, which sees creativity as an integration between the ability to be original and to direct thought and action can have significant implications for those involved in education, especially if inserted in a perspective that considers creative potential as universally distributed and not as a gift that belongs to a few exceptional people (Runco, 2004). If creative thinking is understood solely as the ability to think outside the box, then it appears difficult for a teacher "to recognize the contribution of basic knowledge in the development of creative outcomes" (Andiliou, Murphy, 2010, p.216). If, however, creativity is not conceived only as divergente thinking, the ability to think outside the known patterns, but as a combination of logic and imagination, then it becomes important to stimulate and support in children, individually or in a small group, a process that involves alternation and the intertwining of different forms of thought, between moments in which information and knowledge are collected and organized in a methodical way, moments in which situations or problems are seen from different perspectives and angles, encouraging the ability to ask questions, encouraging emergence of associative links, of perceiving unusual combinations and relationships between ideas and objects, and moments in which one analyzes and evaluates the appropriateness of the ideas that have been generated according to the task in which one in engaged. As a teacher interviewed in a focus group underlines, it becomes essential to guarantee "*the possibility of giving space to divergent thinking and at the same time bringing order to what you do*".

In this sense, an exploratory research on ideas of creativity carried out in Italy through the creation of ten focus groups revealed discordant opinions among the teachers involved. The analysis of the focus groups showed in the first place that there is a very wide and pervasive concept of creativity spread between many teachers. Creativity is intended as being, in a general sense, a positive quality of being a child and of infantile action, a sort of colouring of the entire behaviour of

the child towards external reality. Creativity seems to imply everything the child does spontaneously, without having a specific or peculiar significance:

> The child is creative from the moment he enters the nursery, his whole being is creative on a daily level.
> The child is always creative, it is up to us to welcome his creativity and make the creative process visible.
> In my opinion, creativity exists even without knowledge [...] because a newborn is already creative even just by sucking, he finds a way, with what he knows, to express himself.

If on the one hand we underline the way in which creativity is an aspect that characterizes all children and not an element that belongs only to particular personalities, on the other hand it is considered to be an innate quality and it is identified as a free expression of the child. Spontaneous childhood activity and freedom of expression seem to be seen not only as conditions of creativity but as a definition of creativity.

In contrast, a minority of teachers offers a different definition of creativity, as an element of thinking more concretely operational, a combinatorial process that is based on knowledge and that involves the operations of processing of the stimuli that precede the creative act:

> In my opinion, we mistake creativity with imagination. The discourse of creativity perhaps has its basis in the rule and in knowing the rules and the material. [Creativity] is therefore the ability to construct from the known, according to the rules, that something new. In my opinion, creativity cannot exist without rules, because then we go back to the idea that everything is creative. The rule that says what you can and can't do and then unite the things and anyway it directs you in moving towards that something which allows you to move out the scheme of things. […] first you need to know the rules, then you can see them in another way. The child needs to be given experiences. After having tried things then they can make associations between them, play with them, use them, make them evolve.
> Creativity is certainly linked to freedom, but one must also feel completely part of a situation. […] the more the codes in which the child can work and experiment are enlarged, the more they are given the possibility to affirm themselves. Procedures are therefore necessary so that the child can find their way within various contexts. They must find their way so as to be able express themselves in a creative way.

In these teachers' view the possibility of being creative implies, therefore, the knowledge of rules and codes. In this sense the importance not only of giving stimulus but also of sustaining the ability to organize stimuli is underlined; the importance of sustaining the process of elaborating data and of knowledge and the intertwining between logic and imagination.

## 3. Promoting creativity

In an attempt to overcome an idea of creativity as an innate gift reserved for a few brilliant people, the role and influence of the social and cultural context

as constitutive elements of creative acts is therefore highlighted. From this perspective, creative action is configured as "a form of cultural expression and, ultimately, one of the most emblematic forms of cultural participation: engaging with cultural artefacts, using culture to generate culture" (Glaveanu, 2010, p. 48).

Highlighting the interactive nature of creative processes and actions means recognizing their distributed character and the need to "study the intrapersonal dynamics of creative processes in the context of the interpersonal relationships that make them possible" (ibid., p.63).

Therefore, in line with the perspective of cultural psychology, children's creativity can "be grasped and described in its richness and complexity if analyzed as a situated and evolving phenomenon: located within more or less broad networks of sociality, in the interaction and in the dialogue between people and objects mediated by signs and tools and in the temporal dynamics that qualify their development" (Gariboldi, Pugnaghi, 2020, p. 46).

From this perspective, it therefore becomes urgent to ask ourselves which contextual, social and cultural conditions allow us to recognise, support and promote the creative processes implemented by children. This purpose constitutes one of the main purposes of some collaborative research carried out in Italy, but also internationally (Gariboldi, Pugnaghi, 2017, 2020, 2023), from whose analyzes some key dimensions have been identified for the design of experience and learning contexts capable of stimulating and supporting children's curiosity, imagination and creativity. These are elements that appear relevant therefore for organizing educational contexts that are functional in the promotion of creative processes, stimulating, giving value and supporting the free expression of children's original ideas within the different experiences and educational proposals.

First of all, all the teachers agree on attributing great relevance to the possibility of exploring and experimenting with different spaces and materials; an element that underlines the need to guarantee both an abundant choice of useful and interesting resources and material (Laslocky, Winefield; 2011), and a variety of experiential opportunities in which children are left free to act and interact with things, progressively discovering the potential of their use. The variety of spaces and material to explore and experiment with constitutes a useful condition for bringing out creative behaviour, in so far as creativity can be connected to all spaces and material: there exists not one exclusive one, and neither is creativity confined to one single area of experience.

The variety of spaces and material also implies the multiplicity and multiplication of possible experiences for the child and therefore for the development and consolidation of knowledge (of different material and environments) that each can draw from.

In this sense, a significant role is attributed to flexible or unstructured materials, as do recycled and natural materials such as paper, foam rubber, pieces of wood, flour, sand, boxes, rope, etc. and the almost infinite combinations

of such materials. The teachers also give importance to the unconventional use of furniture or of food and their transformation by means of invention.

> Different, varied material, which can be of all types, natural and artificial. Unstructured at least. A multiplicity of material, because even understanding the properties helps you understand how to use them. There shouldn't only be a certain type of material, there should be a wide variety, so that they can put together different qualities and different material.

In this sense the plurality of the experience with space and material represents a preparatory condition, or rather, a condition for the development and promotion of creative thinking. In fact, the knowledge acquired through exploration and experimentation is used by the children in the creative processes of combining materials, of invention and "creating wholes", that is, when children put together and integrate different materials, in relation to a particular project, so as to produce a coherent whole (Adams, Chen 2012).

So if a teacher promotes and supports the exploration and experimentation of the material by stimulating the children to see new elements and to imagine possibilities, by soliciting the creation of projects and mobilizing them through a series of choices, then the same possibilities of the material can be investigated even in the light of specific questions and within the context of constructive activities that are characterized as open problem-solving situations. These are situations which, while open to a plurality of solutions, initiate the inventive use of material and are therefore functional in activating children's creativity.

These are experiential contexts in which children not only have the opportunity to explore and experiment with a variety of environments and materials, but also to undertake real research processes, identifying and involving themselves in the resolution of open problem situations.

Furthermore, the teachers involved in the various focus groups underlined that in order to support and enhance the different research processes undertaken by children, they must also be able to encounter and experiment with a multiplicity of languages within rich and cultured educational contexts. In fact, if the children are allowed to experiment with a content of knowledge or experience through graphic drawing but also through sound, and bodily expression, through narration (one could continue on and on) a favourable condition for creative thinking and behaviour is created. First, children experience the relative languages as connected rather than separate areas and therefore gain a representation of human codes and languages that is not separate or segregated. Secondly, they are encouraged to imagine (i.e. to prefigure) different ways of manifesting an idea or object, and therefore they nourish their ability to imagine. In the end, such an experience supports the disposition to 'play' with the possible expressions and it nourishes combinatory thinking definitively. In its most simple form the successive adoption of different languages in the course of an activity constitutes a useful

scenario for the activation of the aptitude for connecting, translating, and so combining thinking and representations (Gariboldi, Catellani, 2013).

For this reason, another significant variable, that is recognized as relevant for promoting children' creative thinking and action, is time. In fact, the possibility to take advantage of extended and relaxed time, to have time for reflection and re- elaboration and continuity of action on things, so as to develop in depth research and to evolve activities, represents a condition that can influence the manifestation of creative behaviour and in general, the expressive quality of children's play.

Time represents an element whose importance has been highlighted by different research that has investigated creative processes. In fact, the possibility of having time constitutes a relevant condition for the associative component of creative thinking, in as much as an individual, even when the discovery seems improvised, needs time to spend to go beyond the obvious idea, to find the remote association and therefore produce an original idea (Runco, Cayirdag, 2009).

Furthermore, the creative process is often characterized by the loss of awareness of the temporal dimension and therefore of timelessness (Mainemelis, 2002), because the intrinsic pleasure taken in carrying out the activity, the total involvement in it and the strong concentration on the task attenuates the perception of time passing.

So it is important to guarantee an extended time, in which it is possible to hesitate, re-elaborate, and investigate in a non-superficial way. Time which is not pressing, not hurried, but a time that can be modulated in a flexible manner so as to respect the rhythms of the children and therefore the different ways and times for elaborating the situations that they are experiencing.

> Create contexts in which they have the time to re-elaborate. Perhaps overstimulation is a bad practice because it leaves no time to think. Does not allow the sedimentation of things, especially in children with difficulties. So you need to allow children time to make their own experiences, to explore and experiment.

From this prospective, a project approach to the organization of space, materials and time is very important to support and stimulate children'creative processes, but many teachers also underline how decisive it is that the adult assume a non-directive and non-judgmental style of behaviour, a behaviour which can instil feelings of safety in the child so that they can express themselves. The adult must guarantee the child the freedom to express themselves, avoiding guiding, intervening or conditioning.

> When it comes to handing in their graphic work, I don't look at them. Teachers sometimes breathe down their neck. Intrusion is, I think, bad practice. Always showing how to do something or directing the activity a lot or explaining always how something should or shouldn't be done, saying no a lot, not giving freedom

of expression. The teacher should follow the desires of the children. The teacher must make themselves available to the child, trying not to intervene too much. Try to create a good relationship between them and with the adult so as to create the security needed to be able move beyond, to put them at ease and feel welcomed.

To summarize, from the analysis of focus groups and the study of reference literature, the importance of the presence of an adult who can listen and is curious about children's ideas, favouring freedom of expression and avoiding to conform children to prefigured results emerges clearly. The main enemies of creativity are conformism and trivialization of children's thoughts.

In this sense, it is necessary that the adult stimulates and enhances children's types of creative thinking, asking open questions, giving space and value to the contribution of each individual within the group, encouraging unusual points of view and showing and stimulating the capacity of making connections.

To support and promote the creative processes carried out by children, it is therefore necessary to design educational contexts rich in opportunities and open, i.e. based on listening to and recognizing the multiple child subjectivities.

## 4. Making creativity visible

Which educational strategies allow us to recognise, promote and enhance the creative processes that children carry out in the daily life of ECEC services?

In line with a pedagogical approach that intends to promote creativity from early childhood, observation and documentation therefore constitute those tools through which adults manage to be and remain in solidarity with the knowledge processes undertaken by and with children and avoid thus the perennial risk of overwhelming or inhibiting their exploratory curiosities.

In this sense, with regards to the study and the analysis of the creative processes of children, through the interlacing of the analysed literature and the information obtained in the interviews, we have elaborated a *framework* useful for identifying the main conceptual areas related to creativity in childhood (Gariboldi, Pugnaghi, 2017). In that framework, three main recurring areas are:

- Making connections and seeing relationships
- Open-ended problem solving
- Elaborate theories

In particular, numerous researchers underline the combinatory nature of creative processes, that is the capacity of connective thinking, in other words, establishing links between heterogeneous components, between different languages and knowledge. In this area one of the basic processes is to recognize relations and pattern, when the children find connections and plots between disparate elements or different categories and languages or subjects. In this

sense, the atelierista interviewed in a focus group affirmed that during a project on "sensitive geometries", a four-year-old girl founds that *"the bicycle tire and the orange are the same, because they have the same silhouette, the same soul, the same structure"* (Gariboldi, Pugnaghi, 2020).

But within a pre-school context, also problem-solving is configured as an area which, in connection to play and investigation, interacts and is connected to creativity (Blake, Giannangelo, 2012). In fact, being faced with open problems, that is problems that do not have one single correct solution, but a variety of possible solutions, seems to be largely linked to the activation of divergent thinking, and creative processes (Ward, 2009). Such a process is exemplified in the example mentioned by a teacher during a focus group, with relation to a ludic context:

> There's this little house and there were places to enter for no more than 3 children because there were, they had closed the door, then others who want to enter, others were playing with the clothes, they went and rang the imaginary bell, they did not get anyone. A little girl, the second refusal, we look, hangs in the middle of space, then you see that "drrrrrrr" work the wheels of the brain, takes a towel a little furry, brown, puts it on his head, says: "ding dong, I am a poor old woman shivering all over, let me in" and was able to enter. She found the strategy to enter, for me at the time she was not creative, more, because it succeeds in what others had failed, without making much noise, no... and was able to enter.

This example concerns, in fact, "a true problem solving situation of a social type, which the child solves with a solution that proves to be original, because it is unusual and different from the behaviour of her classmates, but it also appropriate, in that it proves to be useful and efficient with regards to the problem of being accepted in the game group. The child, after the initial refusals, […] introduces a new ludic scheme within the situation, providing a new creative take on the evolution of the game for everyone" (Gariboldi, 2012, pp. 139-140).

Finally, in line with socio-constructivist perspective, children, who is continually searching for the meaning of life, producing interpretative theories. And it is in such a process of construction and discovery of theories on the meaning of life that can be found their creative activity.

In this sense, during a research project we observed a moment of free play in an outdoor environment, in which a group of four-years-olds discovered and played around a puddle. In particular, they tried to understand the phenomenon of floatation by observing, asking questions and formulating hypotheses to explain what they observed. Initially, the teacher triggered those reflections by posing an open question: "why do they sink?", and the children started formulating interpretive theories that explain the phenomenon in terms of depth of the puddle, or otherwise to its nature *"no, it's a quickand that absorbishes (the child makes a mistake in Italian) everything!"*. The teacher then challenged these

temporary hypotheses offered by the children, pointed that *"it doesn't seem to me they're sinking…they're coming up again!"* and a child answered with a creative interpretation: *"may it's because some lives there and sands things back up!".* It was a creative solution because it was original and valuable. It was valuable because it cleared new research paths and because it further nurtured a situation of disagreement, of interpretive contrast, highlighting how in certain situations creativity is linked to the children's learning processes.

From this point of view, creativity is considered as a property of a complex system and. so it can be seen at the same time as a cultural, social and psychological event. In this way of thinking, children's creativity in preschool expresses itself with its relation to a certain socio-cultural domain, which is to be intended both as the organizational and relational context created by the choices, conscious and uncoscious, of teachers, and as the way to conceive the relation between creativity and childhood education from a general point of view, pedagogically and culturally.

Adopting this perspective, the three aforementioned areas of research – thinking, promoting, and making creativity visible – can be articulated in three levels of analysis (educational culture for creativity, creative contexts, creative processes of children), and the way to conceive and perform education to creativity can resent an analyzer of the pedagogical culture of a school, a concrete point of view from which we can recostrut and discuss the complexity of the organization of an education system (Gariboldi, Pugnaghi, 2020).

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