# Maria Montessori's pedagogy and small schools. The Montessori educational method within the multi-classes

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#### **Abstract**

The pedagogical thought of Maria Montessori supports the multi-class as it is able to respect and care for the natural interests of children. From semi-structured interviews made with six teachers of the multi-classes and three school managers of public institutions in the upper Caserta area, it emerged how Montessori pedagogy offers valid and effective suggestions for teaching in the multi-classes. In particular, didactic continuity, heterogeneity, the teacher-director and the learner-actor, time management, reciprocal teaching represent the salient points of the Method embodied in the multi-classes. As soon as it will be possible to return to the classrooms, temporarily closed due to the Covid19 pandemic, the qualitative exploratory research will be completed through the planned focus group, but not yet realized.

Il pensiero pedagogico di Maria Montessori sostiene la pluriclasse in quanto essa è in grado di rispettare e curare gli interessi naturali dei bambini. Da una serie di interviste fatte alle docenti delle pluriclassi di alcune scuole pubbliche dell'alto casertano è emerso quanto la pedagogia Montessori offra validi ed efficaci suggerimenti alla didattica nelle pluriclassi. In particolare, la continuità didattica, l'eterogeneità, il docente-regista e il discente-attore, la gestione del tempo, l'insegnamento reciproco rappresentano i punti salienti del Metodo concretizzati all'interno delle pluriclassi.

Keywords: self-education; multi-class; heterogeneity; reciprocal teaching; teacher-director

Parole chiave: auto-educazione; pluriclasse; eterogeneità; insegnamento reciproco; docente-regista

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## 1. The development plans for Maria Montessori

The fulcrum of Montessori's thought is the conception of the child as the main protagonist of his educational process; in fact, "self-education" represents the heart of the Montessori method, a new vision of childhood compared to nineteenth-century pedagogical theories: it is a revolutionary vision that places the child as both the protagonist and author of development, because he is able to realize his potential. For Maria Montessori (1870-1952) a self-educational context offers the child the possibility of being able to work at his own pace, as motivated to learn by means of the materials which are prepared by the adult, but chosen by the child on the basis of personal interest, thus implementing an individualized learning process (Malm, 2008).

Maria Montessori let herself be guided by previous pedagogical ideologies, in particular by the thought of Fröbel (Bucci, 1990) and by her desire to enhance spiritual autonomy, which offers children the opportunity to discover themselves through play, in the Kindergarten. Furthermore, Maria Montessori shows great interest in the Agazzi sisters, creators of an educational method based on the direct experience of the child. According to them, the child's activity had to be central in the educational process and the environment in which he developed the activity story had to be simple and composed of materials that were part of her daily life: junk. The educational method of the Agazzi sisters, together with the educational method of Maria Montessori, initiated the era of Italian activism based on the idea that at the center of learning there is the experience of the child, actor of the educational process. The pedagogist, combining the two testimonies, guided us to better understand childhood, the identity of her education, the relationship between play and creativity (Cambi, 2010). In addition to Fröbel and the Agazzi sisters, Maria Montessori, in wanting to reconstruct her own intellectual biography, often referred to two French doctors: Jean-Marc Gaspard Itard and Eduard Séguin. In fact, she wrote in *The discovery* of the child (1948): «Don't I think I'm making a mistake by saying that my experience represents the work of three doctors, who from Itard to me took the first steps on the path of psychiatry?» (Montessori, 1950, p. 39). Maria Montessori greatly appreciated Itard's studies, especially a whole series of exercises capable of modifying the personality, healing defects that kept the individual in a state of inferiority. This perspective, different from that of experimental psychology, she believed in the scientific means that also became the means by which an education is given, so that the pedagogy itself has changed (Montessori, 1950, p. 25). Séguin's studies also influenced Maria Montessori's thought, in particular given to the observation of the child, to identify the potential and evolutionary aspects of the personality, collecting information on every aspect of her life (Sandri, 2014). Da Séguin understands the need to make use of specific educational material to promote sensory and motor education and abstract learning (Montessori, 1950, pp. 32-33). Maria Montessori considers Itard and Séguin the only ones

«legitimate founders of a scientific pedagogy in the modern sense, of which she feels she is the continuator, because they were the first not to limit themselves to elaborating instruments and techniques of observation, but were concerned - through techniques and observations - to modify the personalities of the subjects with which they had entered into a relationship» (Tassi, 1991, p.106).



The interest in childhood led the scientist from Chiaravalle to open in 1907, in Rome, in the San Lorenzo district (today it is the central area near the Termini station, in those years it was on the outskirts), her first school of childhood where she will experience her educational method, firmly anchored to the principles of Scientific Pedagogy (De Bartolomeis, 1961; Fornaca, 1978; Bucci, 1990). The experience of St. Lawrence will be documented in the volume The Montessori Method: Scientific Pedagogy as Applied to Child Education in "The Children's Houses" (1909), translated into several languages and received with great enthusiasm throughout the world (Montessori, 2000a). The continuation of The Montessori Method is the volume Self-education in elementary schools, published for the first time in 1916, which offers a broad overview of what school represents for Maria Montessori, from elementary school to university, according to a perspective of ongoing human formation (2000b). After all, Montessori has conceived and experimented an educational approach directed towards the person, able to follow the development from birth to complete maturity: «an education of vastness, a dilating education »able to embrace the world and the grandeur of events and phenomena, natural, social and cultural (Cives, 2008, p. 11). Therefore, the idea of self-education is for Maria Montessori directly interrelated with the trust placed by the adult in the educability of the child and, consequently, in his ability to build knowledge independently. Therefore, the adult has the task of guaranteeing the child the possibility of being able to move in a consciously organized environment, within which he can decide to choose what to be interested in, not only respecting his own developmental stage, but also following his personal interests.

The Montessori method offers children and young people formative moments centred on environments and settings with limited perspectives that «shrink, arousing the inferior qualities of man, reflected in the dryness and misery of textbooks» (Scocchera, 2005, p. 108). After all, Maria Montessori studied and described in the book *The child's mind. Absorbent mind* (1949) the development of the person by identifying a series of phases of growth, namely the periods of growth (in turn divided into other sub-periods) (Montessori, 2014b); they represent the four planes (or levels), each one composed of six years, which follow one another along the path that leads to adulthood:

- the first level, from 0 to 6 years (0-3 and 3-6), is called *childhood*;
- the second level, from 6 to 12 years (6-9 and 9-12), is called *boyhood*;
- the third level, from 12 to 18 years (12-15 and 15-18), is called *adolescence*;
- the fourth level, from 18 to 24 years (18-21 and 21-24), is called *maturity*.

Montessori did not share the traditional didactic practices of her time, which following a linear logic of the child's development, supported the consequentiality of the learning process (Honegger Fresco, 2000, p. 93). Instead, she believed that children's learning took place like waves, that is, different cycles coexisted from subject to subject, a process that can be defined as cyclical and spiral. For Montessori, everyone has his own internal and personal development plan and a different potential, which can be fully respected only through scientific observation, together with a deep knowledge and study of childhood.

Montessori development plans are the basis of the multi-classes present in Montessori schools, as the Montessori teacher guarantees each child the opportunity to follow his own individual path, dictated by the personal rhythms of growth and interest. For the pedagogist, the subdivision by age of the Italian school «is an artificial



isolation that hinders the development of a social sense» (Montessori, 2014b, p. 224); after all her consideration of the traditional school was rather negative. It is enough to read brief passages from the *Method of Scientific Pedagogy* (1909) to understand her opinion of the traditional school which not only creates "isolation", but which also causes the pupils to become dry. The school is the place where:

«children are suffocated in the spontaneous expressions of their personality, like dead beings; and fixed in the respective place, in the counter, like butterflies stuck in a pin; while they unfold the wings of aridly acquired knowledge, which can be symbolized by those wings, which have the meaning of vanity» (Montessori, 2000a, p. 88).

Montessori has turned her attention not only to respecting the individual development of the child, but also to her social life, considered one of the cornerstones of her educational thinking. For her in fact:

«The greatest improvement of children occurs through social experiences. [...] The company is interesting by virtue of the different typologies that make it up. [...] It is inhuman and cruel to bring people of the same age together. [...] Since, in doing so, we break the thread of social life, we take away its nourishment» (Montessori, 2014b, pp. 223-224).

It is freedom that represents the educational means (Capitini, 1955), therefore the adult, through careful observation, will understand the true nature of the child who, moving freely in the environment, will be able to reveal all that strikes his attention to a greater extent and his interest. This is certainly one of the elements that allowed Montessori thought to be consolidated and spread throughout the world; in fact, Grazia Honegger Fresco, referring to the many Montessori experiences in the world, states:

«We are equally sure, with so many European and American experiences, from elementary to high school, that freedom within defined rules and spaces, the enhancement of every possible diversity (age, sex, religion, ethnicity) and self-assessment, are the criteria fundamentals of a truly democratic formation, open to the new, protector of any divergent thought» (Honegger Fresco, 2017, p. 30).

Even Giacomo Cives, who has dedicated several writings to Maria Montessori, testifying to her great interest in the scholar, for works and for pedagogy, already from the volume *La pedagogia scomoda. Da Pasquale Villari a Maria Montessori* (1994), focused on the idea of freedom and on the enhancement of childhood potential, illustrating the cornerstone of the theoretical framework, namely an "education in freedom and for freedom". Also, in the volume "Dilating Education" by Maria Montessori (2008) Cives highlights «the complexity and vitality of an ongoing thought, which has not stopped to fossilize and repeat itself, but is increasingly committed to unfolding, dynamizing, expanding and renewing itself, looking towards tomorrow» (Cives, 2008, p. 57), carrying out an educational project «open to a reality without boundaries in space and time» (*Ivi*, p. 165).



## 2. The Montessori educational method in small school

Montessori pedagogy firmly believes in the structure of the multi-class, a heterogeneous grouping of pupils, present in several small schools scattered not only on the Italian territory, but in many European and non-European countries. The phenomenon of multi-classes, which is very widespread internationally, is labelled in various ways by the many searches in the scientific literature; the phrases "multi-grade class" or "composite class" are often used, but there are also those who prefer to adopt other definitions: *combination classes, double classes, split classes, mixed-age classes* and *vertically grouped classes* (Veenman, 1995).

The "small schools" are present all over the world and it is estimated that the schools organized in multi-class correspond to about 30% of the total schools in the world (Boix-Tomás & Domingo-Peñafiel, 2018, p. 15). In Italy, the "small schools" are located in areas characterized by a certain geographical isolation, such as mountain villages, small islands or rural areas in the hinterland. In these schools the number of pupils can be very low<sup>i</sup>: even in Italy there are small primary schools with less than eight children per class. However, it must be remembered that multi-classes could be formed everywhere (Bouysee, 2002), even where there are no difficulties related to geographic isolation, also because many scholars argue that the heterogeneity of age, in the same class, represents a driving force for the learning (Vincent, 1999a, 1999b).

Multi-classes in small schools are transformed into an intense social space where pupils, budding citizens of the society of the future, experience social participation and understand the true meaning of the great values of democracy and cooperation, managing, at the same time, to experiment the ability to self-educate. The students of the multi-classes are generally more autonomous and responsible, they know how to manage their time, their material, they know how to respect their turn and that of others, they collaborate, organize group work and solve problems and dynamics in a constructive way (Cannella & Chipa, 2019, pp. 88-97).

In many countries around the world the grouping of children of different ages into a single class is a recurring custom; in fact, due to the depopulation of some areas, there is not often a sufficient number of pupils to form a homogeneous class by age. This happens for all those small rural schools, where the stay of the school in a specific area offers the possibility of not breaking up the community of origin; in fact, thanks to the stay in the school area, children do not leave their homeland. The multi-class, however, is not an easy school structure to manage, as it demands that all the teachers involved dedicate a fruitful commitment accompanied by a great ability to plan, a strong collaboration and a great professionalism, compared to the "conventional class" (Cushman, 1993; Gaustad, 1996; Miller, 1996).

Unfortunately, many teachers do not prefer to teach in multi-classes, as this type of school organization certainly requires a more demanding job than traditional classes: it represents a way of "teaching" that requires a vast repertoire of strategies and great dedication. The efficiency and effectiveness of the multi-class structure, in fact, are closely linked to the teachers' planning, as their didactic choices must take into account the ways and times necessary to ensure students the learning to which they are entitled according to class they are enrolled in.

In Italy, INDIRE has largely encouraged the spread and protection of "small schools" by drafting and signing the *Small Schools Manifesto* in 2017, the aim of which was to build a network capable of connecting small schools Italian.



One of the three key points of the *Manifesto* (2017), in addition to preserving the distinctive features of small schools (being a community of memory) and technologies as a tool for inclusion, is the fundamental experience of the multi-class seen as a limit. In fact, it is important to be able to transform a constraint, such as the small number of students, into a resource, such as the high quality of learning, which is possible only through a different paradigm that sets itself the goal of creating learning environments, qualitatively oriented in order to define specific inclusive pedagogical and didactic objectives (INDIRE, 2017).

Today, multi-classes have gone beyond their historic task of literacy in peripheral and isolated areas, becoming true experimentation laboratories designed to offer public schools alternative teaching practices to daily educational practices (Little, 2001, 2006; Stone, 1996, 1997, 1998). Precisely for this reason, Montessori pedagogy supports the multi-class which within the Montessori schools is the consequence of an accurate pedagogical choice, rather than a necessity, as is the current case within small schools.

It was Maria Montessori who provided a practical demonstration on how to organize a school based on the multi-class, which is able to respect and take care of the natural interests of children. In fact, in 1952, in her work *The child's mind* (whose first original edition was published in English under the title of *The absorbent mind*, in 1949) Montessori wrote:

«Our schools have shown that children of different ages help each other; the little ones see what the older ones are doing and ask for explanations, which they gladly give them. It is a real lesson, since the mentality of the five-year-old is so close to that of the three-year-old that the little one easily understands from him what we would not be able to explain to him. There is harmony and communication between them, as is very rare between adults and small children. [...] There is a natural mental osmosis between them» (Montessori, 2014b, p. 225).

Montessori has delivered to the scientific community fundamental studies on the learning process of children, describing "how" children learn and inviting everyone to consider how much education should be studied as a process. What emerges from Maria Montessori's studies is in line with Piaget's constructivist theory of learning (Piaget, 1958) and with Vygotsky's social theory of learning (Vygotsky, 1978), but also with international studies that support the educational value of multi-classes; in fact for the great pedagogist, children who learn from each other should turn their interest only to what they can understand and act, according to their development period. Sandra J. Stone herself, a great scholar of multi-classes, emphasizes the importance for every teacher to know this type of theories, so that they can guide their teaching-learning models: «[...] Successful and effective multi-class teachers integrate this research into their environment, instruction, curriculum, and multi-class assessment» (Stone, 1997, p. 107).

The multi-class for Maria Montessori is what gives substance to her innovative methodology as it puts the needs of children at the center of the learning process, following the times, rhythms and methods that are different for each child. In *Learning from children to be great* (2014), Montessori states that the creativity and skills of the child are present from birth, so they must simply be awakened and supported<sup>ii</sup>.



This is what the teacher in the multi-class must do: he must enhance and enhance the child's abilities in an atmosphere of freedom, without authoritarianism and coercion. Montessori, in fact, emphasizes the importance of authority thanks to which it is possible to teach respect for few clear rules. The Children's Home represents a relational model, the prototype of a society founded on respect for oneself and for others, a society which cooperates, far from the logic of competitiveness (Pironi, 2014). It is an education in freedom, through freedom, capable of turning our gaze to the development of independence and personal autonomy (Montessori, 2000b).

# 3. Montessori self-education experienced in multi-classes: an exploratory survey

In our time, the topicality of thought and the validity of Maria Montessori's educational proposal are tangible within the multi-classes, which is why the training of the teachers who teach you should not only deepen Montessori theories, but also experience them in the classroom. It is necessary to start over from Montessori thought to face the challenges related to emerging educational issues: this is what has been experienced by the teachers who, for some years, have been teaching in the multi-classes of various institutions including the Upper Caserta

I have personally met these teachers during the training course "Design and assessment of skills: authentic tasks and evaluation rubrics", a training course coordinated by me as an expert, held in the 2018/2019 school year. The training course was aimed at teachers of comprehensive Institutes belonging to the Network of Purpose "Beyond the Network" (including the Comprehensive Institutes of Roccamonfina, the leading school, of Mignano Monte Lungo, Rocca d'Evandro, Teano and Vairano Patenora, all municipalities of the Upper Casertano). During the training sessions of the course, I met many teachers who had been teaching in multi-classes for years, as several schools in the Upper Casertano area, located in mountain communities, had to organize classes for heterogeneous age groups. This type of school organization is the direct consequence of the massive depopulation of these areas and also of the decrease in the birth rate. Most of the teachers, coming from these mountain communities, stated that they had lived the experience of the multi-class as pupils, even before living it as a teacher; above all, many primary school teachers declared that they had experienced Maria Montessori's teachings on self-education in the multi-classes. From the meeting with the teachers of these multi-classes, my research path began, aimed at deepening the type of teaching experimented, at evaluating the effectiveness of the Montessori method within the multi-classes and, above all, at discovering which teaching strategies and methodologies were "winning" for the purpose of meaningful learning of pupils. The interviewed teachers of the multi-classes complained of the strong discrimination against their classes: in fact, the low number of members was considered an index of educational mediocrity by families residing in the municipalities of mountain communities. Often multi-classes are considered classes of "second-tier schools" because their educational offer is mistakenly considered to be of low quality and inferior to traditional classes. This statement is in contrast with the results of some national and international researches that have shown how small schools are a place for innovation and pedagogical experimentation (Strike, 2008; Hargreaves, 2009; Mangione, Calzone & Bagattini, 2017; Mangione & Calzone 2018).



The qualitative exploratory research was conducted in the Upper Casertano<sup>iii</sup>, a large area on the northern border of the Campania region, including the three mountain communities of the province of Caserta: Comunità Montana del Matese, Monte Maggiore and Monte Santa Croce. The schools involved in the research are part of the CE 09 Area. The interviews involved teachers who for years have been teaching in the multi-classes of the Primary School of the Roccamonfina Galluccio Comprehensive Institute in Roccamonfina (CE), the Rocca d'Evandro Comprehensive Institute of Rocca d'Evandro (CE) and the Comprehensive F. Rossi Institute of Capriati a Volturno (CE) (see Table 1).

School year 2019/2020		
Institute	School site	Multi-classes
Comprehensive Institute Roccamon-	Primary School	1 multi-class: second and third.
fina Galluccio of Roccamonfina	Conca della Campania	
(CE)		
Comprehensive Institute Rocca	Primary School	1 multi-class: second, third, fourth and fifth.
d'Evandro of Rocca d'Evandro (CE).	San Pietro Infine.	
	School year 201	8/2019
Institute	School site	Multi-classes
Comprehensive Institute Rocca	Primary School	1 multi-class: first, second, third, fourth and fifth.
d'Evandro of Rocca d'Evandro (CE).	San Pietro Infine.	
Comprehensive Institute F. Rossi of	Primary School	1 multi-class: first and second.
Capriati a Volturno (CE)	Letino	1 multi-class: third, fourth and fifth.
	Primary School	1 multi-class: first and second.
	Fontegreca	1 multi-class: fourth and fifth.

Table 1: Primary Schools in the Upper Caserta area with multiple classes

# 3.1 Methodology

The research activated involved six teachers of the multi-classes and the three school managers of the three comprehensive institutes indicated above (see Table 1). All six teachers have a permanent contract and have been teaching in the primary school for many years. Of the six teachers, all women, three have been teaching in multi-classes for many years, while the other teachers have been teaching in multi-classes for a few years. The data were collected through semi-structured individual interviews re-aimed at the six teachers of the multi-classes and the three school managers of the schools included in the sample. The choice of the semi-structured interview, completely similar to the free interview in terms of modality and in-depth analysis of the themes, was dictated by the possibility of being able to flexibly adapt the questions to the interviewer: namely the same questions addressed



to all interviewees were formulated differently from subject to subject, also in relation to the subject's biographical account (Corbetta, 1999, p. 405). It was important to consider that the closer a qualitative interview is to the model of natural conversation, the greater will be the ease with which the interviewee will express his ideas. The initial interviews conducted were fundamental for learning about the educational-didactic experience of the multi-classes. The exploratory approach has allowed us to know and deepen the aspects of Montessori pedagogy implemented in teaching practice, to acquire a greater understanding of teaching strategies and to provide indications for future investigations. The next step to the interviews, interrupted due to the COVID SARS 19 pandemic, involves the activation of three focus groups with all the teachers of the multi-classes of the three complexes. As soon as we return to face-to-face teaching, other elements will be collected through the structured observations of the lessons in the multi-classes, the data of which will be annotated in rubrics specially prepared for observation on the basis of some factors that emerged during the interviews; then everything will be analysed qualitatively. The initial interviews were carried out in the first months of the 2019/2020 school year; the focus groups that had to be activated in the months of February and March 2020, in the second quarter, were postponed due to the closure of the schools for the pandemic (the date has not yet been set due to the new closure of schools in Campania, in the school year 2020/2021). The questions of the interviews were structured on a series of elements that connect the didactics experimented in the multi-classes with the Montessori pedagogy, analysing the advantages and disadvantages of small schools as regards the learning of pupils. During the interviews, the following factors taken from Montessori pedagogy were analysed:

- time, in fact, highlights how the pupils of small schools spend about 7% more of their school time carrying out activities playful-practical (Hargreaves, 1990);
- class size, also Linda Hargreaves (1990) reports a greater degree of individual attention in small schools;
- school-family relationships: in the light of the much-described "educational alliance", relationships with families are less formal, more productive and more capable of enabling "real learning";
- mixed age classes: younger pupils can often learn from older pupils, in a form of peer education;
- the teacher who works in a multi-class has the opportunity to experiment with different methodologies, even if this, besides being demanding, requires a lot of time;
- attitudes: pupils in small schools have problems, a good attitude towards work and responsibility;
- long-term planning: in small schools it is easier to plan and carry out educational activities as the small group-class facilitates their implementation; certainly, at the beginning it may be difficult to take into account the needs of each age group and manage the changes in age combinations of classes;
- meta-cognitive knowledge: small schools in fact favour students to acquire meta-cognitive procedures;
- close long-term relationships: the close long-term relationships between pupils and teachers involved a closer correspondence between the teaching process and the learning process, resulting in greater commitment reciprocal between the pupil and the teacher.

The biographical account of the interviews was necessary to contextualise and more precisely balance the level of participation, interest and involvement of the interviewees. The duration of the interview was very variable,



from a minimum of 20 minutes to a maximum of 1 hour and 40 minutes depending on the experiences, interest and broad or concise answers of the interlocutors. The respondents were grouped into two categories:

- the school managers of the Comprehensive Institutes in which one or more multi-classes are present;
- the teachers of multi-classes of the Primary school of the same institutes including the school managers interviewed.

After collecting the interviews, there was an analysis of the same. There are two levels of analysis, the first consisting in analyzing each interview immediately after completing it to eventually modify subsequent interviews. The second level consists in the analysis of all the interviews (complete transversal analysis). Analysis and transcription are two moments of the research that depend on each other.

During the interview, everything that was said was recorded. At a later stage, the interviews were fully transcribed on a file. The transcription process consists in the translation and interpretation of what has been said and told to make oral language written language. It often happens that it is not possible to transcribe everything as it happens during the interview (intonations, gestures, laughter, facial expressions) and to cope with this problem, conventional griffin signs are used (see Table 2):

R = researcher

I = interviewee

[...] Square brackets for adding facial expressions, laughter, etc.

Lowercase character for low tone of voice

Upper case character for high tone of voice

Punctuation for intonations

Table 2: Trascription conventions

The goal of the transcription was to maintain the meanings expressed by the interviewee and to produce a text for subsequent analysis. To correct some possible inaccuracies, the recording with the first transcription was replayed.

Then the analysis began, after choosing a type of *illustrative analysis*, a content analysis (objective, systematic and quantitative description of the concepts expressed by the interviewee) and a *thematic analysis* (subdivision of the content of the interview by themes) A fundamental step in the research process is the analysis of the texts, from which the meaning of the investigated experience is generated in a systematic and in-depth way. This systematic analysis has all the more value the more it is inserted into the continuous ground of an analytical attitude expressed in the course of experience. The method of analyzing the interview texts was conducted according to the phenomenological-co-hermeneutic approach, searching in the text for the essential themes that arise and are of interest to the study in question. The reading method has been reiterated and recursive, in order to better derive the thematic content in light of the new sensitivities emerging during the analysis. The textual analysis was conducted with the software TaLTaC 3.0 (Bolasco, 2013), a textual analysis program that made it possible



to analyze individual interviews by identifying units, developing categories and making connections between them for subsequent verification.

## 4. Preliminary results and conclusions

From the interviews, some traits of Montessori pedagogy emerged that can be found in the teaching practice of the multi-classes involved in the research, in particular:

- didactic continuity;
- heterogeneity;
- the teacher-director and the learner-actor;
- time management;
- reciprocal teaching.

First of all, the importance of didactic continuity was underlined; in fact for the Montessori method, continuity is a fundamental element, as it is good to follow and accompany the child during his growing up periods, but the continuity of the teacher with the students is not only a Montessori principle, but also one of the cornerstones of the multi-classes; in fact one of the most important scholars of the multi-class organization, Sandra Stone, defines the multi-class as «a group of children of different ages who stay with the same teacher for several years» (Stone, 1996, p. VII). The great emphasis placed on the fundamental presence of the teacher himself over a long period of time is connected to the principle of continuity, which in turn connects to the experimental continuum of Dewey (1938), which places the child's development process at the centre of educational thinking.

Another element widely valued by Montessori pedagogy is heterogeneity, an element that the teacher must grasp as a resource rather than as a limit: above all the teacher must carry out his teaching in the multi-class managing to present and simplify the same topic in an accessible way, understandable to all pupils. The multi-class teacher is similar to the Montessori teacher, in that the role of the teacher can be compared to that of a director, who has to worry about organizing the set within which the performance will take place, will have to observe the working actors in carrying out their roles, providing them with feedback and if necessary, giving them indications as a guide to improve their interpretation, placing themselves not in the centre of the scene but on the sides of it. «Instead of the word she [the teacher] must learn silence; instead of teaching, she must observe; instead of the proud dignity of one who wanted to appear infallible, she assumes a guise of humility» (Montessori, 2000b, p. 113).

Another element of Montessori pedagogy embodied in the multi-class is certainly time management: it becomes essential to have adequate teaching time available to meet the needs of both the teacher and the pupil (Capobianco, 2020, p. 156): learning to manage time greatly increases self-organization skills. The multi-class is full of cultural stimuli, and thanks to the materials prepared by the teachers and rearranged every day according to the interests and use of the children, this type of environment becomes the fulcrum of the didactic action, being completely different from that of the traditional school. This type of organization makes it possible to individualise learning paths: each child is the protagonist of his or her path, in tune with the times and rhythms.



Finally, all the teachers of the multi-classes have focused on the importance of reciprocal teaching between pupils of different ages; in fact, in the multi-class the students who have more skills help their classmates in difficulty, putting in place a "mutual teaching" (peer to peer). Indeed, for Montessori it was essential that the school was a "working community" (Montessori, 2014a, p. 223) in which children could have individual or cooperative experiences, enhancing that individuality in order to make it a resource for socialization. In addition to that, Clara Tornar writes:

«the richness of the social atmosphere that reigns in the Montessori school is a fact that clearly shows itself to the attention of the observer: the presence of children of different ages stimulates the wider prosocial processes towards the little ones, and at the same time it stimulates in the latter forms of indirect learning through the observation of children» (Tornar, 2007, p. 176).

All the teachers interviewed declared that they had experienced how valid the Montessori method was within the multi-classes, and on the contrary how completely ineffective the sterile reproduction of the traditional teaching activity implemented in the homogeneous classes, within the multi-classes was «the multi-class teacher, to meet the needs of all ages, must present children with activities ranging from simple to complex during the explanations in large groups and then focus on the specific needs of the children during the explanation periods in small groups or individually» (Stone, 1996, p. 97). From the interviews it was possible to understand how, even in public schools, the Montessori method is widely known and valued: for this reason, the teachers requested the possibility of being able to follow training courses on the Montessori method. Today the Italian school, especially the small schools where there are multiple classes, are rediscovering Maria Montessori and her method, which she defined as "help for life".

### Notes

<sup>1</sup> The Decree of the President of the Italian Republic approved in 2009, which provides for the reorganization of the school network, establishes that the minimum number of pupils in a multi-class is eight students. In the Decree of 20 March 2009, n. 81 entitled "Rules for the reorganization of the school network and the rational and effective use of the human resources of the school", in Article 10, the President of the Republic issued the regulations relating to primary school classes. It states that: "Primary school classes are normally made up of a number of pupils not less than 15 and not more than 26, which can be raised to 27 if they remain. The multi-classes are made up of no less than 8 and no more than 18 students" (DPR, 2009, no. 81).

"Creativity is enhanced by the Montessori method, just think that among those who attended the Montessori school there are excellent names such as Jeff Bezos, the founder of Amazon, Jimmy Wales, the creator of Wikipedia, Lorry Pages and Sergey Brin, the creators of Google. The "Montessori mafia", as the Wall Street Journal calls the founders of Amazon, Google and Wikipedia and the effectiveness of their approaches learned in elementary school (Retrieved September 15, 2021, from http://www.il-post.it/2011/04/07/la-mafia-montessori/).



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