UNIVERSITÀ DEGLI STUDI
DI MODENA E REGGIO EMILIA

Dipartimento di Educazione e Scienze Umane
Fondazione Reggio Children – Centro Loris Malaguzzi

Dottorato di ricerca in
Reggio Childhood Studies – From Early Childhood to Lifelong Learning

Ciclo XXXV

Giftedness: Making Room in the Italian Classroom

Giftedness: opportunità per l'inclusività nella scuola italiana

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INTRODUCTION

Framework and Aims of the Study

This project was motivated by the lack of visibility of children with a gifted profile in Italian schools. The concept of inclusivity in the school environment proposed in the study could be described as the convergence of gifted education at an international level and Italian special education, merging into a single school model which is attentive to the rights and wellbeing of everyone.

The central idea of this work is the approach of Italian schooling to giftedness, giving a pivotal role to teachers. From teachers' curiosity and willingness to learn, steps were taken towards a participatory educational program to reach students, family, new colleagues, and the school's whole wider educational community in this study.

When discussing inclusive education in Italy in 2023, it is important to place value upon the long path that led to the enactment of one school for all students. In 1977 a National Law (L. 517, 4 Agosto 1977) resulted in public schools welcoming all students, without distinction based on backgrounds, languages, disabilities, or learning difficulties. This meant opening the doors to a pedagogical model that valued education more than curriculum, with a focus on learning to grow and develop the self. It is well-established nowadays that it is possible to develop personal proficiencies within a group rather than alone (Luigi d'Alonzo 2008). Integration at school meant the development of new interpersonal relationships not only in class but also with several professions, psychiatrics, and psychologists. It also entailed the development of new special needs teachers with a priority focus on the child with disabilities, but also responsible for the class development as the curricular teacher (L. d'Alonzo 2019; Luigi d'Alonzo 2008; Ministero dell'Istruzione e del Merito 2022).

In the move towards inclusiveness, it is important to look back on previous milestones that helped Italian schools to become a model (Ianes, Demo, and Dell'Anna 2020). Italy started with the integration in schools of disabled students who were used to a different didactic and curriculum and a life project based on oneself. Special education started focusing on the individual, adding the element of a rich context and aiming to build the feeling of group membership. This need to be part of a group drove the research to find a place for each student in the classroom, and each child in the

world, to belong. This view is much broader than a simplified didactic to transmit content. However, this process has faced several challenges generated by barriers such as stereotypes, prejudices, fear, and impotence, to mention just a few.

Some key elements have also been highlighted regarding giftedness education. Specifically, background studies have been focused on differences in mainstream education and non-negotiables. Some criteria have been extracted by the work of Bruce M. Shore (Shore 2000), Joyce VanTassel-Baska (VanTassel-Baska 2005), and Joyce VanTassel-Baska and Tamra Stambaugh (VanTassel-Baska and Stambaugh 2005). There is a need for attention to metacognition (as monitoring, evaluation, and control of thinking strategies) and its connection to flexibility and accuracy (Shore 2000). VanTassel-Baska and Stambaugh specifically mention "barriers" that could occur while addressing differentiation:

> "a) degree of differentiation required b) need to provide advanced learning opportunities beyond grade level, c) philosophical barriers and antipathy of many teachers towards the gifted learner and their needs, d) lack of understood services for the gifted population, and e) lack of services for gifted learners leading to greater neglect" (VanTassel-Baska and Stambaugh 2005, p.212).

To stimulate thinking skills, curricula should reflect complexity, important issues, and enough creativity to provoke a variety of feedback. Some suggested methodologies are problem/project-based learning, the regular usage of rubrics to assess, and, possibly, involvement of expertise within the educational community beyond just the teacher (VanTassel-Baska and Stambaugh 2005).

There is a parallel between gifted education and special needs education (referring to disabilities and learning difficulties) in mainstream education that presents, amongst several challenges, one main issue: A heterogeneous classroom hosts several differing needs, different learning paces, and different interests (Luigi d'Alonzo 2019; VanTassel-Baska and Stambaugh 2005).

The goal of this study was to evaluate the impact of teachers' education on students' understanding and wellbeing, as well as building up professional expertise based on practitioners' enquiries that could lead to a long-term reflection in the school (Asquini 2018).

The fundamental hypothesis was that, through education which involves the active participation of the learning community, it is possible to make visible the child's right to

learn. This was in line with Matheis et al. (2017) which stated that teachers with more knowledge about giftedness have a more positive attitude towards gifted students.

The broad aims above have been divided into objectives:

a) Understanding teachers' awareness about giftedness and the guidelines to refer to;
b) The impact of the education of teachers on the projected image of the child with a gifted profile;
c) Teachers' beliefs about inclusivity and educational impact;
d) Teachers' ability to identify students with gifted profile;
e) Exploring possible pedagogical and didactic responses to a multi-level class, from a gifted profile to a whole-class approach and vice versa.

The methodology was developed based on educational action research, with great influence from research and training. The intervention was conducted in a state school in Parma, Northern Italy, with approximately 1500 students aged between 3 and 13 across preschool, primary school, and middle school and about 150 teachers, of which around 20 teachers were involved in the participatory research. Research feedback was recorded using an online questionnaire addressed to all teachers at the school before and after the research, alongside in-depth interviews with key teachers and feedback from students and parents. Qualitative coding of the interviews with educators enabled an analysis of the pedagogical experimentation in the classrooms of preschool, primary, and middle schoolers.

Due to the complexity of this study implementation was made possible thanks to the professional contributions of:

a) The University of Pavia for the psychological gifted profile presented by Prof. Zanetti;
b) The University of Padova for a pedagogical perspective on the right to learn by Dr. Zorzi and Philosophy for Children interventions by Dr. Antoniello;
c) Sapienza University of Rome for submitting WISC-IV tests to students and a lecture to teachers on how to understand a cognitive report by Dr. Farese.

Thesis Structure

The work presented here is divided into three autonomous chapters; each one analyzes a specific step of the research, following a chronological development based on the empirical feedback that arose from teachers involved and findings collected during the investigation.

The first chapter is centered on teachers' education and its effects: the impact on school inclusivity, the opportunity to differentiate in class, teachers' perceptions of students with a gifted profile, and the presence of children with such qualities in class. Before and after intervention an online questionnaire was submitted to schoolteachers to monitor changes.

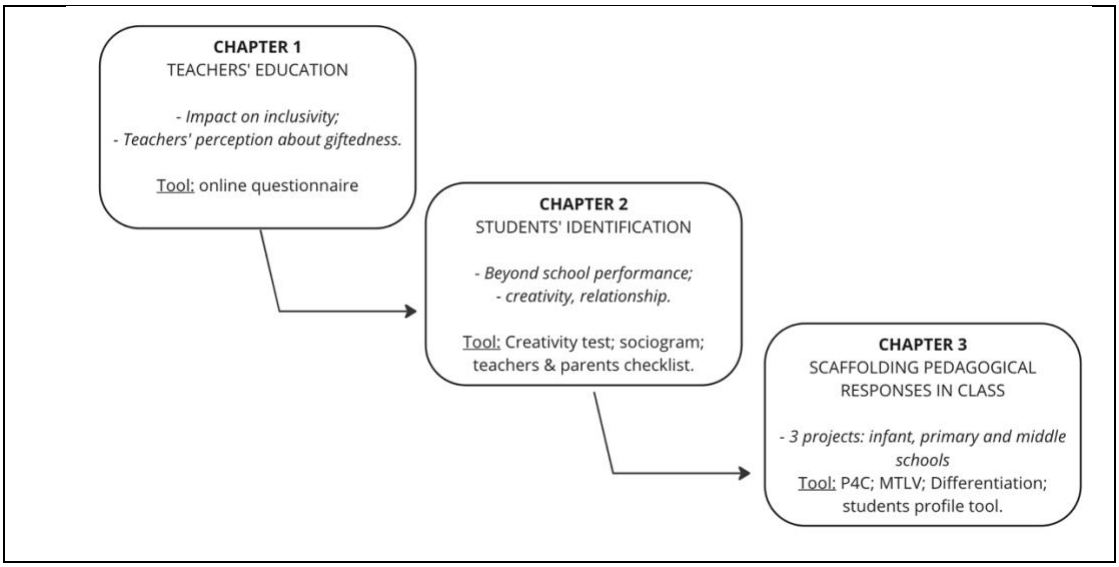
The second chapter is dedicated to the identification of students with a gifted profile by teachers; through new lenses beyond school performance, teachers placed greater focus on creativity (Moretti and Biasi 2017) and relationships in class (Reffieuna 2003). Awareness about the topic was deepened using the final tool, a checklist for teachers and parents to nominate gifted pupils (Fabio 2019). During this phase, a review of school records was carried out based on acquired socio-medical records.

The third and final chapter is devoted to a pilot study to scaffold teachers while learning and experimenting with possible pedagogical responses in the classroom. Interventions that have been investigated are divided by schools:

a) Infant School: Philosophy for Children (Lipman 1976);
b) Primary School: Philosophy for Children (Lipman 1976), Differentiation (Tomlinson 2001), Making Thinking and Learning Visible (Giudici and Barchi 2011; Mughini and Panzavolta 2020; Ritchhart and Church 2020);
c) Middle School: Co-constructing a personalized learning plan with the student to deepen metacognition and self-awareness and reach a possible tool for formative assessment that leads to optimized personal resources (Mariani 2000; Sannipoli 2019; Sunderland 2013).

A common thread runs through this study; namely, the opportunity to form an educational community around a new topic which cares for the rights and wellbeing of students, based on a competent research teacher open to meaningful dialogue with students, families, and scholars.

Figure 1 - Thesis structure.



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Chapter 1 Impact of Teachers' Education on the Gifted Profile

Theoretical Framework: International and Italian Laws on Inclusivity in Schools

The Italian school system is intended to be fully inclusive, based on a single public organization for all pupils (Ianes et al., 2020); however, is important to consider what form this inclusive teaching takes. This study looks at giftedness[1] within Italian schooling.

An inclusive teaching approach considers the overall process of planning, enacting, and evaluating for all students. It is an open approach towards several teaching strategies that leads to an effective education for each student. Inclusive teaching looks at all possible reasons why differentiation between pupils could be beneficial to learning; in this way, it is much broader than the field of special education. Inclusive education from a conceptual point of view pays attention to the unique traits of each individual, while special education focuses its attention on a specific typology subset within the many human differences (Demo, 2019).

In 1994, the European Council reaffirmed that education is a fundamental human right that should be made suitable for everyone, emphasizing that "gifted children should be able to benefit from appropriate educational conditions that would allow them to fully develop their abilities. Adequate tools are needed for this purpose" (Recommendation n.1248/1994, art. 3). In the same recommendation each state is requested to respect giftedness, allow its identification, and provide relevant in-service teacher training, in order to deliver educational opportunities to develop the full abilities of children with a gifted profile. Flexibility is suggested as a path to respond to the very different needs of each student (Recommendation n.1248/1994, art. 3).

This European recommendation has not been put into practice in the same way across Europe (Cimò, 2006; Mormando, 2011). In Italy, the inclusive approach to schooling that has been in place since 1977 prohibits the existence of special schools (L. 517, 4 Agosto 1977), and nowadays it can be perceived as a country that has achieved a merging between special and general pedagogy, at least in theory; nevertheless, many struggles arise from this configuration in specific everyday situations (Dell'Anna and Marsili, 2022*).* Italian special schools were for students with

[1] Due to the merge of approaches and culture proposed, terminology related to gifted profiles (gifted, high potential, highly able child, highly cognitive potential and similar) will be treated as synonymous, although they are not (Zanetti, 2017).

mental, physical, and/or intellectual disabilities[2]; as Caldin (2019) states, the idea was to support the pupil to compensate for what was missing compared to an idea of the "norm". In 2012, the Italian Ministry of Education, within its National Guidance, maintained that "particular care is reserved for pupils with disabilities or with special educational needs, through appropriate organizational and educational strategies to be considered in the normal design of the educational offer"[3] (DM. 254/2012, p. 14). Although this indication is based on ideas of disabilities and/or learning difficulties (2011 and later 2017), it grants an opportunity to individualize teaching and learning based on personal needs. Teachers and schools seized this opportunity for the few students that had been identified as gifted even prior to the Italian Ministry of Education confirming, in 2019, that this position was absolutely correct, and that gifted children are indeed students with special needs (MIUR Nota Ufficiale 562, 2019). The general hesitant attitude towards addressing giftedness in education in Italy was, however, interrupted in two regions that tried to make some advancements with regional guidelines: Veneto (DGR n. 665, 28/04/2015) and Emilia Romagna (Legislatura X Commissione IV verbale, 15/04/2019).

This can be considered a step forward in recognizing each child's right to a suitable education, but it also highlights the issue of labelling. "Special educational needs" as a label was coined in 1978 to move away from the outdated term "*handicap"*, but UNESCO (2007) now recommends that it is time to consider a change in terminology again to invoke educational policies with a rights-based approach; moreover, labeling students risks altering children and teenagers' identities (Zappella, 2021). The Reggio Emilia approach operated with inclusive practices in education even before it became a legal requirement in Italy, with a philosophy based on—amongst other things—the child's own unique competence in relation to the teacher and learning material; the result is that children have "special rights" (Runswick-Cole & Hodge, 2009). In other

[2]Exceptions to this were two pilot project schools for gifted lasted students which lasted only a few years: "Il villaggio del superdotato" of Don Calogero la Placa, established 1968 in Palermo; and "Emilio Trabucchi", established in Milan in 1984; both of which closed due to a lack of funding (Mormando, 2011).

[3]"Particolare cura è riservata agli allievi con disabilità o con bisogni educativi speciali, attraverso adeguate strategie organizzative e didattiche, da considerare nella normale progettazione dell'offerta formativa".

words, the right to learn, and learning in your own way and at your own pace, is a well-accepted right of each student. As Pinnelli (2019b) reports about student potential, already previously expressed by Piaget (1974),

> To satisfy the right to education means to assume a much heavier responsibility than to ensure for each one the acquisition of reading, writing and calculation; it truly means guaranteeing to each man the whole development of his mental functions [...] taking into account his constitution and aptitudes, so as to not destroy or squander any of the possibilities that man carries within himself[4] (Pinnelli 2019a, p. 314).

The complexity taken into account by inclusive education (Bocci, 2021) is a positive ground in which recent theories about the education of gifted children can be embodied, and recent studies have recorded an increased awareness in Europe about the fact that "gifted and talented children need special provision to reach their potential" (Tourón & Freeman, 2018, p. 67).

The most agreed-upon approach to giftedness within the Italian school system seems to be an idiographic one, where nature and nurture can be combined to explore the student's potential and competences. As defined by Dai,

> the idiographic approach by nature recognizes the multiplicity of gifted manifestations, and tends to see specific instances of giftedness as prototypes (typical cases) or even exemplars (distinct instances), but does not exclude the possibility that there are atypical manifestations of giftedness that defy whatever the standard image prescribes. Therefore, idiographic conceptions are more inclusive by nature (2018, p. 4).

Scholars internationally have moved away from the idea of giftedness as a single feature, broadening the concept of giftedness to include potentials, different fields (not always measurable ones, such as art, as stated by Witty in 1950), and even "gifted behavior" (Renzulli, 1986) to arrive at the *differentiation paradigm,* allowing expression of each child uniqueness. As expressed by Dai and Chen, "the differentiation paradigm focuses on manifest needs and proximal characteristics closely associated with the current curriculum (what is taught) and instruction (how it is taught)" (2013, p. 159). Lo and Porath suggest that, in the new millennium, a progressive switch is taking place

[4]"soddisfare il diritto all'educazione significa *assumere una responsabilità molto più gravosa che assicurare a ciascuno l'acquisizione della lettura, della scrittura e del calcolo; significa veramente garantire a ciascun uomo l'intero sviluppo delle sue funzioni mentali(…), tenendo conto della costituzione e delle attitudini, di non distruggere o sciupare nessuna delle possibilità che l'uomo porta in sé".*

towards an "education that is gifted, to ensure every student is properly challenged" (Lo & Porath, 2017, p. 352). This concept is related to valuing the zone of proximal development, proposed by Vygotsky in 1930, and still used in special education to place more focus on the process of learning rather than the accomplishment, allowing a principle of equity. This equity has been well represented by Don Milani in *Lettera ad una professoressa* (1967), in which he wrote "non c'è nulla che sia più ingiusto che far parti uguali fra diseguali"[5]; additionally, Santi (2019) highlighted that a key point of equity is understanding that differences are needed in order to pair opportunities, which in teaching leads to differentiation (Santi, 2019). Gifted "differentiation paradigm has a more circumscribed goal for gifted education: matching curriculum and instruction with students' capabilities and characteristics in a given classroom situation, which is made possible by ongoing assessment and flexible adaptation in curriculum and instruction" (Dai & Chen, 2013, p. 160). The "gifted child" label encloses a variety of individual profiles, to improve each student's personal development specific learning needs are requested; therefore a single label is not representative of a population (Zanetti, 2017); thus it would be more effective and fairer to employ an approach that would serve gifted students in response to their individual needs (Tomlinson, 2004). Heterogeneous classrooms are a current reality and therefore strategies to face its management, and at the same time assure learning rights to each student, is a teacher's duty (Renzulli & Reis, 2018; VanTassel-Baska & Stambaugh, 2005). Researchers have highlighted that gifted students could regress towards average levels of achievement (Pinnelli, 2019a; VanTassel-Baska & Stambaugh, 2005) and their research has demonstrated the barriers that can impede differentiation for gifted students: some due to a specific, advanced ideal level required; some due to a lack of specific guidance from the Ministry of Education; and some, lastly, due to "philosophical barriers and antipathy of many teachers toward the gifted learner and their needs", as VanTassel-Baska and Stambaugh reported. VanTassel-Baska (2005) focused on the "non-negotiables" for gifted programs, operating on the assumption of a need for a

[5] Don Milani: There is nothing more unfair than making equal parts of unequal parts (translated by the author as all Italian quotes and citations in this work).

differentiated curriculum in accordance with the intention of most schools to educate every child to their full potential.

Borland (2005) wrote that "we can, and should, have gifted education without gifted children" (2005, p. 1), highlighting that educational programs should provide differentiated curriculum in order to serve the equal right of every child to deserve appropriate education. Borland highlights Gallagher's observation (1996) that from an educational point of view it is important to understand whether giftedness is a useful construct. This calls into question the efficacy of gifted programs in terms of wellbeing and child development. From an educational point of view, this vision is not far away from Renzulli's School Enrichment Model (SEM), which states that "gifted" should be a behavior and not a noun; that intelligence is multidimensional; that, as well as its "three rings model" (above-average ability – creativity – task commitment), interactions with context and personality play a big part in giftedness; and that creativity is fully expressed by the manipulation of knowledge (students as producers versus users of knowledge). These lead to a "menu" of opportunities along the school path (Renzulli & Reis, 2018).

Gagné (2010, 2018), who developed the Differentiated Model of Giftedness and Talent (DMGT), drew attention to the transformation of natural abilities (gifts) into knowledge and skills (talents) through intrapersonal and environmental catalysts. He considered that 10% of the population could be target for this model aspiring to reach a recognized talent, and that pace and ease of learning paths are a trademark for giftedness (Gagné, 2010*; 2018*). Article 3 of the Italian Constitution states that it is duty of the Republic to remove any barrier that impedes the full development of the human being (*Costituzione della Repubblica Italiana*, 1947); therefore, schools have a duty to ensure the fulfillment of every child's potential.

From an educational point of view, Ziegler's Actiotope Model of Giftedness is also important in conceptualizing the development of talent as an interaction of internal and external resources. Exogeneous resources are characterized by a richness of learning resources, which is why the offering of opportunities has an important role in an educational context. At the same time, though, awareness of personal ability together with interest can foster personal growth (Ziegler, 2005; Ziegler et al., 2017).

Flexibility is key in order to respond to the needs of many individuals within a class, no matter what the label would or could be. Teachers cannot effectively serve their

students and their classroom without this flexibility, nor without cultivating curiosity in the relationship between learner and teacher in order that the teacher can discover the needs and abilities of each child (d'Alonzo, 2019; VanTassel-Baska & Stambaugh, 2005). The above-mentioned studies are aligned with the philosophy of many schools: to support personal growth and development.

Teaching is a complex activity; within teacher education, pedagogical-psychological knowledge (PPK) is needed so that the teacher can optimize the learning environment.

> Knowledge about giftedness and (fostering) gifted students is a part of PPK that falls within the scope of (educational) psychology courses that are a compulsory component of university teacher education in most countries […] Knowledge about giftedness is considered especially relevant for identifying gifted students, for adaptive teaching and promotion that meets the needs of gifted students (Heyder et al., 2018, p. 30).

The same authors reveal that a higher incidence of teacher misconceptions about giftedness is linked to a more negative attitude towards supporting students with a gifted profile (2018), another reason to support a personalized education.

In addition to providing theoretical knowledge about giftedness and gifted education, research has also proven the need to touch base with students during teacher education: By unveiling a student's characteristics and strengths, fostering the child's learning path becomes increasingly practicable (Sánchez-Escobedo et al., 2020). The need for a professional background in gifted education is also supported by the impact of beliefs on the teaching relationship (d'Alonzo, 2019b); following the disharmony hypothesis, high intelligence comes at a cost, usually a social and/or behavioral one. Teachers with more knowledge about giftedness are more in favor of those students (Matheis et al., 2017). There is also a wide gap between scholars of the field and media information, which still influences teachers' beliefs and captures the general public (Gauvrit, 2014).

In 2021 the World Council for Gifted and Talented Children (WCGTC) published the document *Global Principles for Professional Learning in Gifted Education*. In all ten of their principles, it is stated that educators should receive extensive and ongoing professional education to be able to respond to the rights and needs of the whole child with a gifted profile, on the level of both the individual teacher and the whole school (WCGTC, 2021).

In Italy there is no formal teaching plan for educating teachers about giftedness, either before or during their teaching career; this is true both for curricular and special needs teachers (Dell'Anna & Marsili, 2022). Instead, initial teacher training follows two main paths: (1) pre-primary and primary school; and (2) middle and secondary school, i.e., to teach students aged 11-18 years. Both require university education (Cappa et al., 2013). Training is formally provided and regulated as an entry point for teaching while in service, but is not formalized nor mandatory, as detailed by Cappa et al. (2013). The five-year university degree to become a formally qualified teacher in pre-primary and primary education covers four main areas: (1) the teacher's role; (2) main subject content; (3) workshops; and (4) internships. Middle to secondary school teachers follow a different path in which the main university study is still linked to subject content, and teaching is among one of the possible professional opportunities; after the Bologna university reform, this pathway now involves completing the "3+2" university path (3 years of undergraduate study plus two years of postgraduate study) followed by a year of active teacher training (Tirocinio di Formazione Attivo, or TFA)(Cappa et al., 2013). Support teachers follow the same course structure: one year specific to each school level (infant, primary, and middle/secondary). As a qualified teacher, it is possible to get contracts as a substitute teacher or participate in national calls for long term contracts (example: http://www.gazzettaufficiale.it/eli/gu/2023/09/09/211/sg/pdf). Courses to be a qualified support teacher are comprised of 60 credits: 20 credits of special pedagogy, 1 credit of assistive pedagogy, 8 credits of educational and developmental psychology, 3 credits of school legislation and inclusivity, 4 credits of child neuropsychiatry, 9 credits of school grade-specific workshops, 12 credits of internship, and 3 credits for writing a thesis (*DM_30_09_2011_specializzazione_sostegno.Pdf*, n.d.). This complex system to qualify a teacher does not address giftedness, which could be included as a topic in both the five-year pre/primary education course and the one-year course to qualify for subject teaching or special support (TFA).

The aim of this study, within wider research, is to broaden the concept of inclusiveness in Italian schools. Policies about personalization or differentiation of the school curriculum in Italy explicitly mention only disability or difficulty, excluding resources; they therefore leave only a small opening for adaptations for giftedness, except in the case of explicit disharmony, where it is a self-evident issue (MIUR, 2012).

1.1. Study Motivation and Aims

The primary motivation for this study is the invisibility of giftedness in many schools in Italy.

The main goal of this study is students' wellbeing, which is only a small part of teachers' education. The research path has two main goals: (a) to improve teachers' awareness about giftedness, and (b) to empower teachers to understand and act consciously.

The key areas that this research path aims to address and assess before and after intervention are:

a) Perception of the school as inclusive, as rated by teachers;
b) Teachers' perception of opportunity for differentiated activity for gifted pupils;
c) Teachers' feelings about the presence of gifted pupils in their class;
d) The projected image of the gifted child.

2. Method

This study was grounded in teacher research methodology following the stream of formative educational research (Asquini, 2018). It is an empirical approach to research that gives teachers a pivotal role in their training in new topics and builds on their professionalism (Vannini, 2018).

2.1. Location and Participants

The intervention was conducted in Parma, a medium-sized city in Northern Italy with 197,000 inhabitants (*Comune di Parma*, 2022), in a school with about 1500 pupils aged between 3 and 14 years and about 150 teachers across preschool, primary, and middle school. The research topic was proposed to teachers in October 2020 during a teachers' committee of about 150 teachers, supported by the head teacher of the school; the possible interest was gathered, and a specific online meeting was held to present motivations, educational panorama in other countries, and Italian legislation regarding children with a profile of giftedness. A group of teachers, all interested in a deeper understanding and willing to commit to a two-year project, created the core group of researchers within the school. The school had just one middle school-aged pupil who

had been identified as a “gifted student”, for whom a very generic personalized plan had been formalized. The research group for the school year 2020–21 was made up of 20 teachers: 3 from preschool, 9 from primary school, and 8 from middle school. Amongst them, 17 were curricular teachers and 3 were special needs teachers. In the second year—that is, 2021/2022—only 17 teachers were involved for various reasons, including the ending of the school cycle (i.e., those who had been teaching Year 5 of primary school or Year 3 of middle school). The research idea was proposed to all teachers and participation was voluntary.

A strong motivation for teachers was the fact that the most widespread idea of inclusive schooling in Italy has a biomedical approach and aims to compensate for some children’s disabilities (L. 104, 5 Febbraio 1992), learning difficulties, or other disadvantages (L. 8 Ottobre 2010, n.170). Their impression was that, very often, schools answer to this by simplifying the curriculum for the whole class. Teachers realized they had no educational structure or background in how to recognize a gifted profile, much less in how to welcome one.

During the first meeting, some goals were established: (a) to identify tools to look at the class from points of view other than subject performance; (b) to determine what kind of relationships exist in class; and (c) to establish whether a gifted child’s way of learning is different from that of other students in the class.

The literature of reference for gifted education was established to be within the differentiation and inclusive paradigm (Dai & Chen, 2013); it was agreed that Italian school is unique and mirrors our society, and it was felt that school also needs to foster a sense of community across our differences.

The investigation was conducted in 25 classes in the school year 2020/21 and in 24 classes in 2021/22.

2.2. Measures

Before the intervention (T0 – Sept 2020), an online questionnaire was completed by all teachers to investigate (a) their perception of inclusiveness in Italian schools, (b) their

awareness of giftedness, and (c) their awareness of the Ministry of Education's recommendations regarding children with a gifted profile. The same questionnaire, with minor changes, was used post-intervention at the end of the study (T2 – June 2022) to record the effect of the intervention.

3. Intervention Based on Participatory Research

The need to activate teachers' knowledge and develop new expertise together as a community was the key element in developing a design that was based on participatory teacher research (Asquini, 2018; Kanizsa et al., 1998). Teachers in Italy, as professionals, need a boost in their knowledge, expertise, and influence on society (OECD, 2016). Working as a team was also regarded as an opportunity to share the responsibility, to create space for dialogue within the school context, and to discuss ideas; learning and scouting together was a way to reduce the pressure of investigating a relatively unknown area and to review results (Asquini, 2018). Implementing changes that had positive outcomes within the school was a clear goal since the very beginning, and the school had already faced fundamental innovative didactic changes in the past: It was the first school in Italy to scrap grades for primary years, and heavily cooperative learning had already been introduced. Now it was felt to be right to increase understanding of giftedness. A concern taken into account was that, after a long program of educational sessions and in-class activities, some classes could end up without any children with a gifted profile identified, which could in turn be disappointing for participating teachers. This is why individualized learning has been stressed regarding both the topic of giftedness and the development of a research path. Teachers administered the research tools that had been previously agreed upon together, collected students' first reactions, and discussed feedback together in small groups. Combining simultaneous learning and practice has been key to observing students from a different perspective. As noted by Sanchez-Escobedo et al., "studies suggested that an important predictor of teachers' knowledge about gifted students is based on contact with gifted students, since they help teachers recognize their characteristics and educational needs" (Sánchez-Escobedo et al., 2020). The idea of the

teacher as a researcher was also very present in the philosophical approach of Loris Malaguzzi and the School of Reggio Emilia as far back as 1963:

> Together with Claparède, we say "What is needed is this: the constant presence of scientific attitude, that is to say the attitude of teachers marveling when faced with the fact of their everyday professional life, who want to interrogate them, and attempt to obtain an answer by subjecting them to methodical observation and experiment" (2016, p. 84).

Within the Italian active pedagogical movement, we find Danilo Dolci who in 1973 discussed teachers as key to connecting and building the relationship between the child and their learning towards a freedom; he indicated preference of maieutic over pedagogy to emphasize self-growth during the learning process (Dolci, 1973). The active participation of students was the focus of several thinkers of that period; again, in Italy, primary school teacher Mario Lodi described in 1977 "una scuola che ha per fine la formazione della persona intesa come ricerca e sviluppo dei talenti di ognuno perché arricchendo e realizzando sé stessi ne viene arricchita di riflesso l'intera comunità"[6]; that is, the school as a place where everyone discovers their interests (Lodi, 1977, p. 217). Working with gifted behavior was something new to our research group of teachers and it raised the fact that we had to work with children and teenagers with a profile that, so far, we had not considered specifically. A child-centered pedagogy, as tried out in Italy in the second half of the twentieth century, is also recommended in the Salamanca Statement of 1994 (UNESCO, 1994). The Salamanca Statement clearly reinforces that special education should place emphasis on the potential of children and that curricula should be adapted to children's needs, as well as mentioning a formative assessment to support a learning path; the teachers clearly spot the opportunity to understand how to help every child in their class. Also following the Salamanca statement's suggestion of involving teachers in action research, the teachers' research group planned out the required theoretical seminars before acting in any way in the class.

[6] "A school that aims to educate the individual, understood as research and development of everyone's talents, because enriching oneself and self-fulfillment in turn enriches the entire community" (personal translation)

Seminars were developed online due to COVID restrictions and were always open to all teachers at the school, including those not taking part in the action research; scholars led the group in their own field of expertise. Five seminars were organized:

1) History and paradigms of gifted education, held by the researcher, highlighting the several visions in the history of giftedness, their impact on gifted education, the existing landscape worldwide, and the possible justification for a fully inclusive school model in Italy.
2) The gifted child profile from a psychological perspective, held by Prof. M.A. Zanetti of University of Pavia, also mentioning the Italian experience and legislation.
3) From educational special needs to educational rights to learn and wellbeing, held by Dr. Eleonora Zorzi of the University of Padova, leveraging on the pedagogical aspect of educational rights, as well as moving away from the biomedical approach to special education in favor of the wellbeing of every student.
4) Differentiation as a possible didactic answer to a multilevel classroom, held by Dr. Anna Monauni of Università Cattolica del Sacro Cuore of Milan, highlighting the need to value the process of learning, individual interests, and area of expertise of each student.
5) Reading a cognitive test report, held by Dr. Morena Farese of Sapienza University of Rome, helping teachers to understand possible resources arising from the test and eventually areas to be improved, including cases of twice exceptional children (i.e., children with both a gifted profile and learning difficulties).

The first two seminars highlighted the importance of understanding the idea of “average” or “standard” that very often led to the planning of a lesson or assessment. The more that awareness was developed about variance within the class, the more evident it became that the idea of differentiation was emerging. Respecting the student had to mean moving away from the “one-size-fits-all” type of lessons, instead finding

the right connections to scaffold everyone's learning (d'Alonzo, 2019a, p. 124; Tomlinson & McTighe, 2006). On the other hand, as stated by Ann Tomlinson,

> the larger system of schooling in which a persistent undertow of the "norm" has the effect of setting apart students who do not appear to approximate the norm. Furthermore, I will argue that the specialties created as we systematically segregate from the "normal" students those whom we determine to be "not normal" (Tomlinson, 2004).

The research group felt the need to understand giftedness, but from the beginning some concerns were clear: (a) Would the emergence of a new label in the school create a new divide in the class? And (b) How can a teacher's learning path be shaped to allow them to better understand every student?

The Reggio Emilia approach helped to create the possibility of accepting a more complex classroom with an inclusive approach, because through a new perspective a better way to address the needs of the class could be found: "impegnandoci a pensare e creare contesti educativi complessi, volevamo abbracciare e non ignorare il concetto delle differenze tra bambini, nella consapevolezza di imparare dai bambini stessi i vari modi dell'apprendere e del crescere"[7] (in Edwards et al., 2017, p. 217).

The research teachers realized that, based on the total number of pupils enrolled (about 1500), the school should have at least 30 pupils with a gifted profile even according to the most conservative IQ psychometric criteria of 2% of the total population (Consiglio Nazionale Ordine Psicologi, 2018). The school, as previously stated, had only one child identified with a gifted profile. Furthermore, teachers involved had agreed that the most coherent philosophical approach to giftedness was the one leveraging on a possible development of interest and skills, nurture instead of nature, and enriching and accepting personal differences (Dai, 2018; Dai & Chen, 2013), through which 10% of the population could benefit from being considered gifted from an educational point of view (Gagné, 2018). The vision of a highly impactful education was more in line with the inner essence of schooling. This would mean, of course, that

[7] By committing ourselves to thinking and creating complex educational contexts, we wanted to embrace and not ignore the concept of differences between children, in the awareness of learning from children themselves the various ways of learning and growing (translated by the author)

the school had tens of pupils with an as yet undiscovered giftedness profile, unnoticed by teachers, parents, and children alike. These possible numbers posed the idea that in every class there could be a child with a potential not yet recognized. Once again the Reggio Emilia approach gave insight into the next steps: teachers felt the potential need to look at pupils through a different lens and to move away from a generic profile to identify specific children with whom to start a common path of knowledge (Edwards et al., 2017, p. 205).

Identifying pupils was also considered important because the common perception of most teachers in research was an image of a painful mismatch between cognitive and emotional or social sides; this vision, often supported by media (Heyder et al., 2018), was in line with the biomedical approach to schooling integration that tries to compensate for something that is considered missing (Caldin, 2019).

The above ideas of a gifted profile and perceptions held by teachers had to be accommodated consciously in the school.

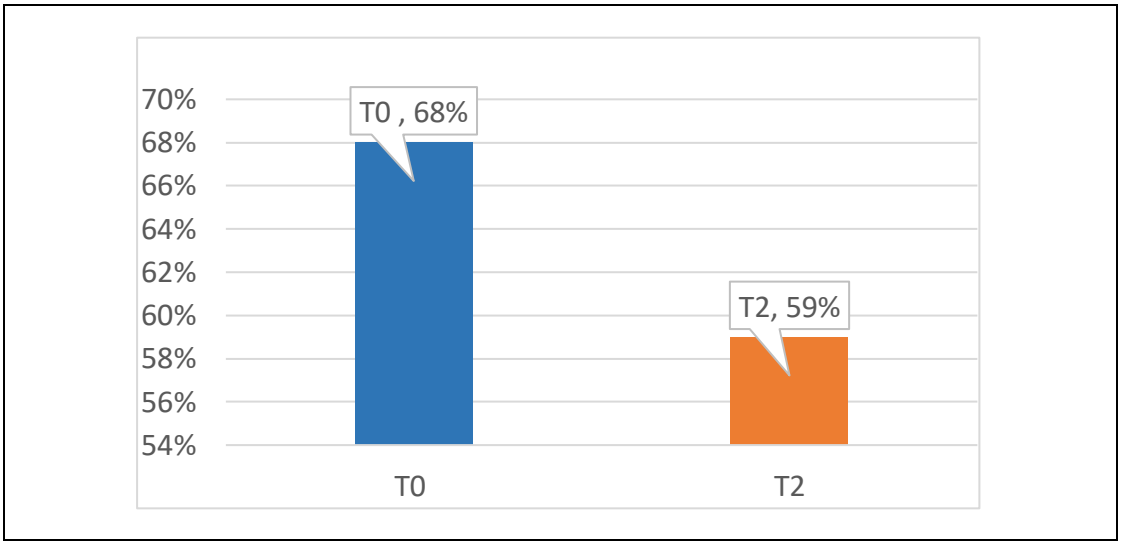
4. Findings

Since 1977 (L. 517, 4 August 1977), Italy has boasted a schooling that tends towards inclusion; this path began with a biomedical, compensatory approach and revolved around the concept of "average/standard" with which the concept of special education was associated (Caldin, 2019). With the evolution of legislation, special attention in the classroom was extended to an increasing number of situations, creating the well-known SEN (Special Educational Needs) definition that allows inclusion of all situations that need extra attention. Based on this strong history, teachers were requested to rate their perception of inclusiveness in the school with a score between 0 (minimum) and 10 (maximum). A score equal to or greater than 7 was considered positive feedback (positive $\geqq 7$), and 68% of teacher respondents awarded such a score to the school before the research; answers to the same question were 59% positive after two school years of educational seminars and in-class activities (Fig.2). In Table 1 the analysis of responses highlights feedback based on involvement in the research. A general

decrease has been registered, and the teachers that gave the worst score were those with gifted pupils identified in their classes.

Figure 2 - *Positive Perception About School Inclusiveness T0 Sept 2020 - T2 June 2022*

Teachers perceived a broader inclusiveness of the school before the research.



Note: the figure reports positive marks given to the perceived school inclusivity (answers ≧7).

Table 1 *- Perception Of School Inclusiveness T2 June 2022, By Teacher Groups*

Perceived school inclusivity positive (≧7) and negative (≤6) expressed by teachers, divided by their involvement in the research.

Teacher's involvement		% per group		% per group
Active participation	≧ 7	62%	≤6	58%
Pupil identified in class		29%		71%
Random involvement		67%		33%
No participation		60%		40%

Note: teachers with a student identified as gifted expressed the worst mark for school inclusivity.

The educational relationship between adults and pupils has a key role in motivating, learning, and allowing the risk of better understanding (d'Alonzo, 1999). In 1994 Magaluzzi stated the importance of the image of the child projected by the adult as the starting point of teaching[8] (2017); for this reason, teachers were asked to describe, in their own opinion, the gifted child's self-perception. Both before and after the research,

[8] "Il ruolo dell'adulto come insegnante è complementare a quello del bambino come apprendista… l'immagine che hai del bambino: da lì inizia l'insegnamento" (Malaguzzi, 1994 p.52 citato in (Edwards et al., 2017, p. 205)

respondents often mentioned feelings related to “uneasiness” and being “at the mercy of their emotions”.

Table 2 - *Teachers' Views On Self-Perception Of Gifted Students*

What kind of self-image will a gifted child have?	High self esteem	secure	independent	uncomfortable	insecure	Like any other child	Outsider in school	Strongly self-demanding	mercy of their emotions	Other
T0 tot Sept20	9%	7%	13%	20%	7%	3%	14%	10%	14%	2%
T2 tot June22	11%	4%	5%	18%	11%	4%	9%	12%	20%	6%
T2 Trained teachers	9%	3%	3%	18%	12%	0%	6%	15%	26%	8%
T2 student in class	21%	0%	7%	14%	14%	7%	15%	7%	14%	0%
T2random/none training	12%	6%	9%	18%	9%	9%	12%	9%	12%	6%

Note: the research shifted some projected feelings, but drivers remained emotions and discomfort. Nobody amongst the trained teachers thinks that they are like all other children.

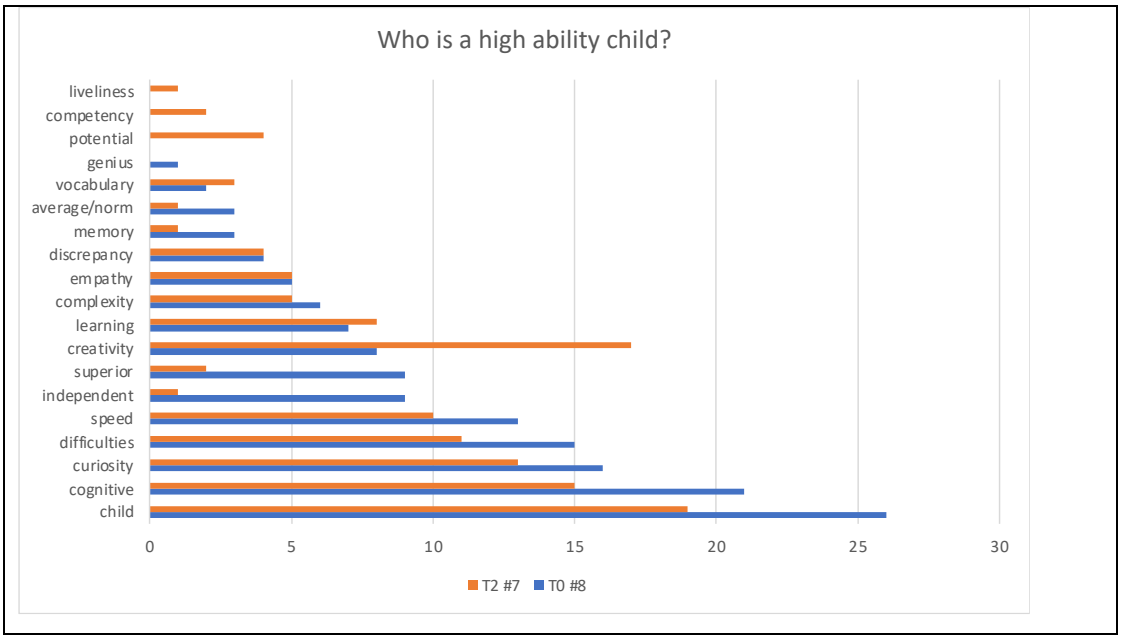
The projected self-image reported by teachers involved in the research changed: together with experiencing a feeling of uneasiness, students will have little control of their emotions, be very self-demanding, rarely have positive self-esteem, lack independence, and feel very different to other children.

The projected self-image reported by teachers without involvement during these years kept an image of discomfort overall, but a very vague idea of the child.

As one of the challenges of giftedness as an area of study is the presence of several definitions of giftedness—as reported, amongst others, by the Italian Council of Psychologist (CNOP, 2018)—teachers were also asked both before any educational activity and after to describe, according to them, the characteristics of a gifted child. The questionnaire had an open-answer format to allow more freedom, and then the analysis started with a word cloud to categorize feedback. The most mentioned word in both sessions was *child*, which defines an important first measure because above all they are children. It is interesting to note that, after two years of activities in the school, the importance of the cognitive element and the “superiority” perceived in the gifted profile diminished while creativity, potential, and learning competency increased. Another key element that arises is that comparison with a “norm” becomes less mentioned (see Fig. 3).

Figure 3 - *Who is a high ability child T0 vs T2, as perceived by teachers*

Characteristics reported by teachers according to their idea of gifted child, before and after intervention.



Note: Teachers put the importance of cognitive development in first place before the intervention in school; after the two years, creativity bounced up to first place.

Amongst the initial doubts about the research, one had been whether gifted children really exist. Based on this, teachers were asked if they envisaged someone with gifted behavior among their students. 19% of teachers answered positively and, astonishingly, after two years this percentage went up to 55%. The perception of possibly having a gifted student increased for all teachers, regardless of involvement in any type of training. More specifically, the highest scores were given by teachers actively involved in the research and who had students nominated in their classes. Still, around 50% was reached even by teachers who only attended seminars or were only occasionally involved (See Table 3).

Table 3 - *Teachers' Belief Of Having A Gifted Student In Their Class.*
Before intervention 19% teachers hypothesized having a gifted student in class; afterwards this figure was 55%.

Do you think that you have a gifted child in your class? Total teachers' feedback	T0 YES	T2 YES
	19%	55%
Active participation to action research		73%
Nomination High Ability students in class		67%
Participation in seminars		56%
Occasional involvement		50%
No involvement		33%

Note: the most involved teachers widely believed they may have a gifted student in their class.

Furthermore, teachers' perceived possibility of having had a gifted student in class at any point in their career increased. Consistent with the previous result, the groups of teachers who reported the highest positive responses are those with a student nominated in their class and those actively involved in the research (see Table 4).

Table 4 - *Teachers' Belief Of Having Had A Gifted Student At Some Point In Their Career.*

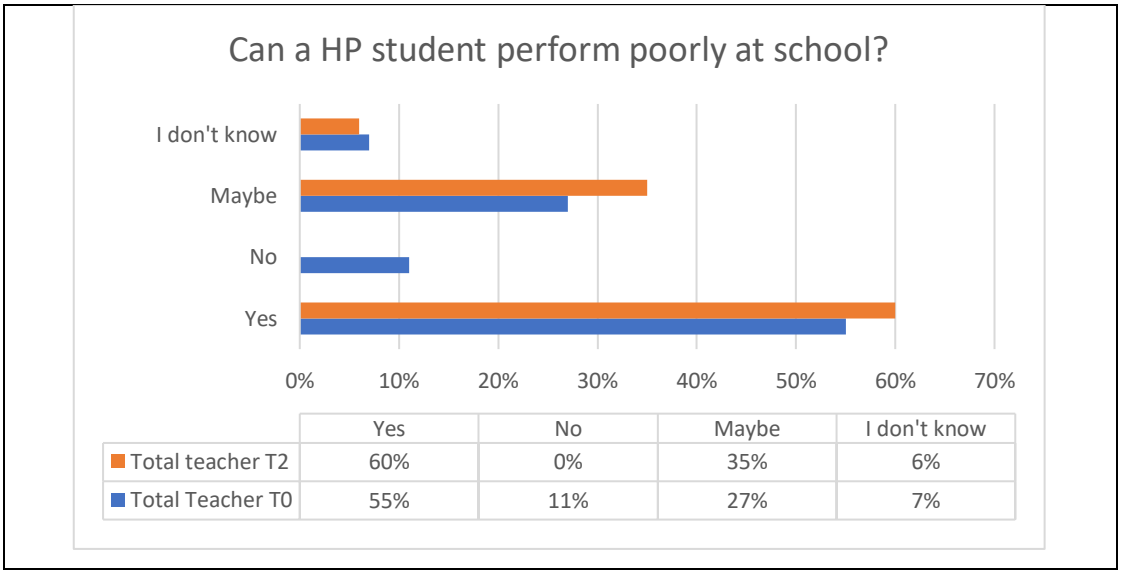
After intervention, teachers reconsidered profiles of past students.

Do you think you have had a gifted student at any point in your career? Total teachers' feedback	T0 YES	T2 YES
	41%	53%
Active participation in action research		67%
Nomination of gifted student(s) in class		86%
Participation in seminars		56%
Occasional involvement		0%
No involvement		43%

Note: teachers with high involvement in the intervention redefined profiles of former students the most.

To investigate the possible confusion between a student with a gifted profile and a high achieving student, teachers were asked if it would be possible for a gifted student to perform poorly at school. Answers mostly aligned with the correct idea that it is inaccurate to strictly associate school performance and giftedness. After two school years of research, nobody answered definitively that it would be impossible for a gifted student to obtain bad results at school (Fig. 4).

Figure 4 - *Can A Gifted Student Perform Poorly At School?*
Projected school performance based on giftedness.

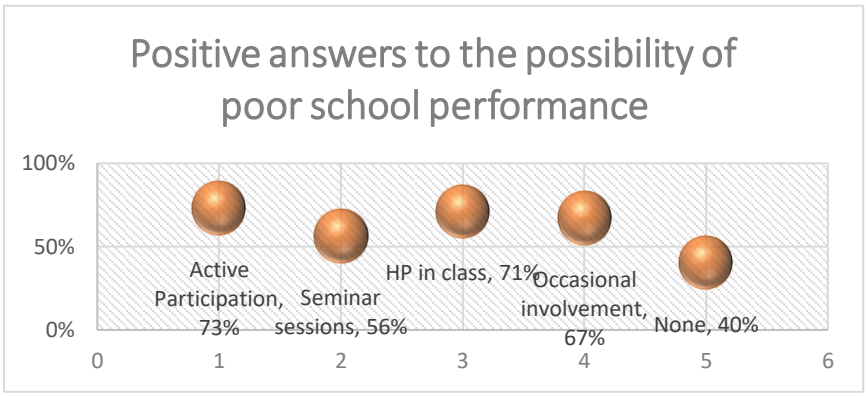


Note: After the intervention in school nobody believed that it is definitely not possible for a child with a gifted profile to perform poorly.
"HP" stands for High Potential which is how the question was made in Italian.

Within the positive answers received, percentages were analyzed by group typology. 73% of active participants answered that it is possible for a gifted student to perform poorly, as did 71% of teachers with a student nominated in class. The lowest percentage of positive answers at 40% related to teachers without involvement in the research (see Fig 5).

Figure 5 - *Percentage Of Positive Answers To The Possibility Of Poor School Performance Among Gifted Students.*

Teachers envisage the possibility of poor school performance for gifted students based on their participation in the research.

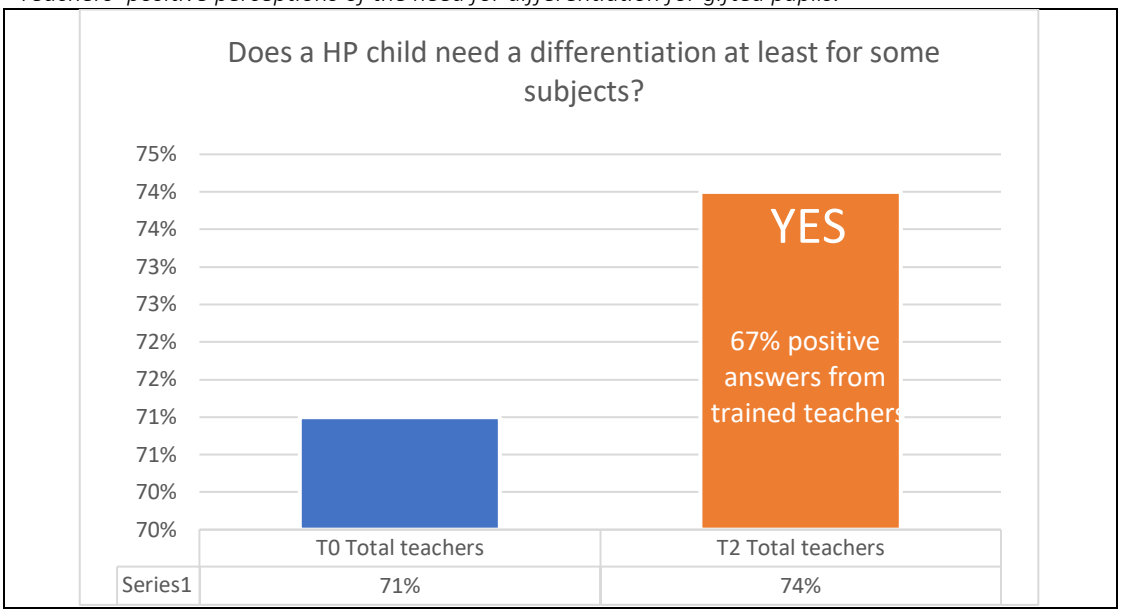


Note: Teachers who actively participated in research or had identified gifted students in their class were most likely to foresee the possibility of poor school performance.

Delving into more specific didactic information, once it was accepted that school performance can be improved in some circumstances, teachers' opinions were investigated regarding the appropriateness of differentiation in class for gifted students. Answers were very positive, with over 70% in favor in both pre- and post-intervention questionnaires. After the action research the positive attitudes, envisaging differentiation for at least some subjects, accounted for 67% out of 74% by educated teachers who were fully involved in the field (Fig 6).

Figure 6 - *Need for Differentiation for at Least Some Subjects.*

Teachers' positive perceptions of the need for differentiation for gifted pupils.



Note: Teachers who followed the educational program believed in the need for differentiation to allow the best results for gifted students (67% of positive answers).

Another topic investigated was the appropriateness of introducing some sort of screening to identify gifted students. Although respondents were generally very positive after the intervention compared to before, this was the one area where feedback was less positive. The impact of the research is relevant because out of the 77% positive answers, 70% come from teachers with some sort of involvement in the research (see Table 5 and Fig 7).

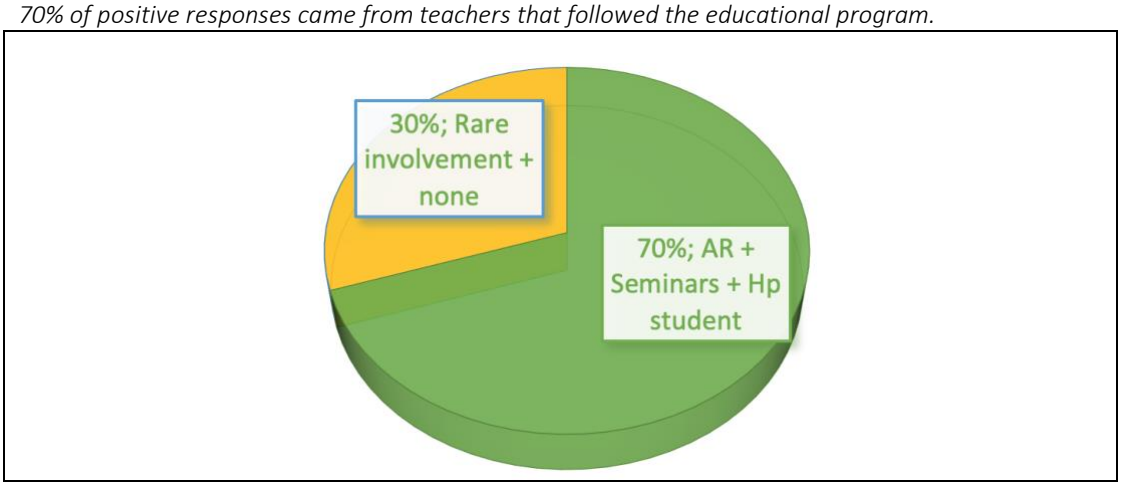
Table 5 - *Views On The Appropriateness Of Screening Students To Identify Giftedness.*

Before the research, the vast majority of teachers were positive towards a screening; afterwards, some doubts arose.

Should students be screened to identify giftedness?	Yes	Maybe	No	I don't know
T0 total teachers	59%	27%	9%	5%
	86%		14%	
T2 total teachers	58%	19%	10%	13%
	77%		23%	

Figure 7 - *T2 Positive Responses From Teachers Towards Identification.*

70% of positive responses came from teachers that followed the educational program.



Note: This chart represents positive answers, but 23% of respondents were against identifying students with a gifted profile.

In the first online questionnaire, 87.5% of Parma Centro School's teachers declared that they had never been exposed to any information about giftedness for educational purposes. This serves as a reason why only 36% of teachers knew before the research that pupils with a gifted profile would be categorized in the special needs group in Italy. Pupils entitled for any of several reasons to be in the category of special needs students (Bisogni Educativi Speciali, BES) would have a personalized learning plan, but over 51% of teachers declared "definitely not" or "I am not aware of it".

5. Discussion

This pilot project reflects possible understandings that would need a wider intervention to be fully grounded. Numbers of participants are too small to be split into many categories; that would have been interesting to further investigate (e.g., Primary school teachers that actively participated, or curricular teachers versus support teachers). It has been a privilege to be able to extend the opportunity for learning through participatory research to all teachers. A key driver throughout the research has been to explore a possible parallel between international literature that reflects an

inclusive view of gifted education (i.e., the differentiation paradigm and uniqueness of each gifted profile) and the inclusive history of Italian schooling since the 1970s.

5.1. Discussion: School as an Inclusive Context

Responses suggest that the belief of the school as inclusive decreased after the intervention.

The possible interpretations of the lower scores given to the Italian school are twofold: (a) on the child's side, the requesting of adaptation to the given context, and (b) on the teacher's side, the sense of inadequacy of the professional teaching education.

The feedback received by teachers confirms that accepting every child in one school is only a first step, albeit an important one, towards a truly inclusive idea of schooling. Broadening the differences between learners gives rise to the need to plan curricular activities and expectations in different ways, following on from the concept of a learning unit for each student no matter their starting point, in line with the suggested continuous dialogue between several worlds existing within each class as an important milestone towards a truly inclusive approach (Demo, 2019). Focusing attention on the giftedness profile, so far not commonly considered in class, has clashed with school inclusiveness. It could also be assumed that through additional education of teachers and working in class to scout gifted behaviors, the myth of "global giftedness" (Winner, 1996) or "genius" (Lucangeli, 2019) was quashed. Removing the label of an assumed "genius profile" could have left room for a real child with resources and needs. These reasonings echo the words expressed by Heyder et al.: "teachers with more false beliefs about gifted students evaluated the promotion of gifted students more negatively than other teachers did" (2018, p.38).

5.2. Discussion: Projected Feelings About Self of Gifted Children

Teachers reported ideas of uncomfortable feelings at school for the child, as well as the consciousness that they are busy in a challenging learning activity. Ideas about uneasiness could be influenced by a mix of public media, often not very positive towards

the topic of giftedness (Heyder et al., 2018), and a general ignorance towards the subject which leads to a lower priority of attention within the school (they are "like any other child"). Both visions would create an alert for educators in relation to the UNESCO statement "*Healthy and happy learners learn better*" (2016, p. 7). This would call for action and would require further investigation into wellbeing of all students at the school. The projected self-perception of gifted students is better represented by the teachers that had a competent direct experience with some students with gifted profiles; the experience allows for a more well-rounded profile, not so focused on the cognitive, and can aim to achieve a more authentic relationship. The creative side of the student can spring to life when the teacher's vision allows it (Piske et al., 2017), and the learning potential expressed by Vygotsky's Zone of Proximal Development can be revealed to its full extent.

5.3. Discussion: Breaking Down the Concepts of "Norm" and "Average" in Learning

The intervention allowed contact with children bearing a gifted profile, and this interaction knocked down some preconceptions of the perceived "normal learning path". This hypothetical average learning curve guides teachers' planning, in accordance with Tomlinson: "we appear to work in a system in which a *norm* defines the parameters of our practice" (2004, p.520). Borland also warned us about the risky idea of an expected "normal" response by learners and respecting a singular timetable (2005). These ideas show up in the most common discussions with people that do not have knowledge of giftedness, which are: *Do they really exist?* Or, *If they are so clever, they will succeed anyway* (Terrassier & Gouillou, 2016). At the same time, understanding that the "norm" does not really exist opens the door to a better investigation of differentiation in class. The idea of "norm" leading the planning and teaching process indicates the need for a deeper understanding, and an investigation of differentiated teaching in a class would be key to making "thinking and learning visible" (Mughini & Panzavolta, 2020; Project Zero & Reggio Children, 2009).

Some descriptive profiles by middle school teachers about gifted students include "Intuisce i contenuti della lezione già in fase di elicitazione, propone esempi pertinenti

che esulano dai contenuti disciplinari, pone domande perspicaci, mostra curiosità[9]" and "Avendo più di un alunno con comportamenti ad alto potenziale, devo dire che sono diversi fra loro. Una caratteristica che li accomuna è la curiosità e il desiderio di approfondire. Sono ragazzi con alto livello intellettivo e motivazione allo studio, ma necessitano sempre di nuovi stimoli[10]".

The concept of the "average" learner or child can be overcome through differentiation, where it is recommended to know both ends of the spectrum to be able to plan for everyone in the class (d'Alonzo & Monauni, 2021). In relation to the possible "underachieving" results of gifted children, it is important to recall that "cognitive abilities mark one of the most important aspects of learning preconditions (e.g., Deary, Strand, Smith, & Fernandes, 2007) and are estimated at least implicitly by their teachers on an every-day-basis (Pretzlik, Olsson, Nabuco, & Cruz, 2003)" (Machts et al., 2016); therefore, for teachers without giftedness knowledge, it is easy to assume that intelligence equates to top results and it will be difficult for underachievers and lower-scoring learners to be seen.

5.4. Discussion: Identification

The idea of screening has been debated internally because many teachers perceived labels as a divide amongst students. The position held by the group of teachers in the research was that a gifted student in class could be an opportunity to focus on resources rather than on differences; or, as described by Zappella, inclusion based on person and qualities (2021).

Social psychology highlights the tendency to categorize; in education, this is reflected in the use of labels to strive to address a student's needs (McCulloch & Sutherland, 2014). The internal debate among teachers centered on two points: (1) every label creates a difference; and (2) without knowledge and expertise, it is not possible to teach

[9] "They already intuit the contents of the lesson in the elicitation phase, propose relevant examples that go beyond the disciplinary contents, ask insightful questions, [and] show curiosity" (translated by the author).

[10] "Having more than one student with high potential behaviors, I must say that they are different from each other. A characteristic that unites them is curiosity and the desire to examine in depth. They are teens with a high intellectual level and motivation to study, but they always need new stimuli" (translated by the author).

effectively. Inclusive pedagogy focuses on each child's ability and asserts that all children can make progress with learning. Therefore, the individual learning curve should be the goal to assess and evaluate, with a strong connection to personal attitude and desire (d'Alonzo & Monauni, 2021). In this respect, the Capability Approach also supports differences within the class allowing participation and wellbeing, leading to the concept of "evolving capabilities" that bonds together concepts of capability, opportunity, and agency (Santi, 2019). To achieve a classroom community comprised of full, well-rounded members, teachers should be aware of labels but dare to go beyond and focus on each child's ability and potential.

The results obtained in the school in Parma are aligned with literature vis-à-vis the importance of teachers' education, as "teachers with more false beliefs about gifted students evaluated the promotion of gifted students more negatively than other teachers did" (Heyder et al., 2018, p. 36; Matheis et al., 2017, p. 136). We can add that Italy does not provide any preservice nor in-service knowledge about giftedness. After the educational effort on the topic, a clear openness towards students with a gifted profile was perceived in the school (a teachers' educational program was approved for all).

5.5. Discussion: Teachers' Education

The uncertainty expressed by teachers about a possible personalized plan for students with a gifted profile finds its roots primarily in the lack of education on the topic, but it could also be justified by the fact that in Italy special needs is associated with the idea of compensation (MIUR, 2012). Consequently, it is easier for Italians to understand that children with disabilities, learning difficulties, language issues, or any other temporary issues need teachers' attention, rather than a child with a gifted profile. These visions are not aligned with recent scholars' views on inclusion, as expressed in the theoretical framework of this study.

6. Conclusion

In conclusion, this pilot project that took place in one school has confirmed that teachers' research has the power to allow a group of teachers to build on their professional abilities and to empower a voice that stands out from the crowd (Vannini, 2018). This new professional stature provides a broader inclusive approach, mentioning giftedness as a possible pupil profile and looking at the child behind the label. The other factor under investigation was the possibility to raise awareness regarding the topic, and the results of this study show that the research intervention produced a sort of ripple effect that also impacted teachers not directly involved. It was also confirmed that the wellbeing of a student, in line with the International Classification of Functioning, Disability and Health by the World Health Organization (WHO, 2001), could be strongly impacted by the context of development. As stated already by Pinnelli:

> opinions and beliefs of teachers, as well as all those environmental aspects that influence the life context of each individual, can have a facilitating or hindering impact on the functioning of the person, in this case of the student who shows a certain cognitive vivacity in the classroom[11]" (Pinnelli, 2019a, p. 65).

The same author warned of the possible reduction of a child's potential and repression of their learning path when ignored and/or not stimulated appropriately (Pinnelli, 2019b).

The participatory research has been a successful methodology to empower teachers, not only in terms of increased knowledge but also in motivating them within the school to act in accordance. After the intervention, the teachers' council approved mandatory teachers' education on the topic and has established that teachers in charge of special needs should also have competencies that relate to giftedness.

Teachers in schools are the ones able to make the difference when educated on several different ways of learning within the class and respecting the pace and interest

[11] "che le opinioni e le convinzioni dei docenti, così come tutti quegli aspetti ambientali che influenzano il contesto di vita di ogni individuo, possono avere un impatto facilitante o ostacolante sul funzionamento della persona, in questo caso dello studente che mostra una certa vivacità cognitiva in classe" (translated by the author)

of every pupil. A broader view of inclusion would suggest identification of several unmet learning opportunities within every student and putting in the effort to respond to them, no matter what their label may be, if it is functional to build a dialogue between teachers and learners' efforts (Biasi et al., 2019; Dell'Anna & Marsili, 2022).

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CHAPTER 2 Identifying Gifted Students in School

1. Theoretical Framework

In his 1925 speech at the Congress of Luxembourg entitled "The appropriateness of forming special classes of 'more gifted' pupils", Giuseppe Lombardo-Radice stated that "A group of 'more gifted' children in a class of 'ordinary' children has the function of yeast. If we remove them, we will have the *yeast* and the *dough* separately[12]" (1925, p. 7). This statement seems to anticipate and define the Italian approach towards what today could be called mainstream education, without special schools. This same speech stresses the need for a full understanding of each child—including their learning journey—and of relationships between peers, as well as of the vision of school as a "workshop of children, rather than of the class" (1925, p. 9). Such a vision requires the teacher to be attentive to the needs of each child without "neglecting the most gifted" (1925, p. 9). The importance of a competent teacher was highlighted by Lombardo Radice, and the speech clearly mentioned the different levels which are always present in the classroom but in the faith that "the school [is] made for the students" (1925, p. 9); therefore, by allowing space and creativity, everyone can witness the development of their own learning path (Lombardo Radice, 1925). In 2018 the Italian Ministry of Education, University and Research issued the Note 1143 *School Autonomy as a Foundation For Educational Success For All*, in which the theme of personalized education is evoked to ensure a "quality schooling for all" (*Autonomia scolastica Nota MIUR n.1143 del 17/05/2018*), and in which the role of the teacher encompasses that of a competent researcher of effective solutions, beyond labels. This transition seems to have matured over the years with the integration of children with disabilities and learning difficulties as well as comparisons with different professions. The approach is not the formalization of a situation nor certification, but instead involves finding solutions to optimize learning.

While maintaining awareness of the variety of existing definitions, Stoeger et al. (2018) summarized four main categories into which definitions of giftedness fall in the context of giftedness education:

[12] Translations from Italian (books, speeches, legislations) have been freely translated by the author.

1) Psychometric definitions (that is, who performs well in tests of intelligence or creativity);

2) Performance definitions (identification of those who achieve the best results, for example in the classroom or in school competitions);

3) Definitions based on a social label (often based on socially recognized competence and on an expert's nomination);

4) Based on a specific ability within a specific domain (for example, excellence in a specific field such as mathematics or music that may qualify the person as gifted).

Identification tools are selected and evaluated according to the definition of giftedness which is applied. Stoeger et al. (2018) highlighted how research surrounding giftedness has shifted towards considering a wider plurality of aspects: It has moved from a focus on personality traits to multidimensional models that include learning behavior; it considers creativity and motivation to a greater degree; and it has shifted towards a more systemic vision that pays greater attention to context and learning opportunities. Additionally, there is now a greater focus on the learning process and learning path. Stoeger et al. (2018) thus underline how we have moved from a compensatory view - with an emphasis on "dysynchrony" which is often between cognitive and socio-emotional development (Terrassier & Gouillou, 2016) - to a focus on potential and resources (Stoeger et al., 2018). Stoeger et al. also cited expert research relating to identification systems:

> Consideration of contextual factors during identification also helps to ensure that children identified as gifted are truly outstanding within the norms of their respective sociocultural milieu (Sternberg, 2007)[…] The more developmental and learning processes are included within the identification, the easier it becomes to apply identification results to improve the effectiveness of learning and talent development efforts (Grigorenko & Sternberg, 1998; Kanevsky, 2000) (2018, p. 30).

Although international research indicates a variety of factors and a complexity now known in the evaluation of giftedness, in Italy the National Council of the Order of Psychologists has decided to adopt an IQ cutoff of 130 as the prevailing index of giftedness while stating that it is not the only parameter to be taken into consideration (Consiglio Nazionale Ordine Psicologi, 2018). Considering the very mixed population

present in school, including possible children with learning difficulties and attention deficit and hyperactivity disorders (ADHD), General Ability Index (GAI) has been as well considered a valid measure, mainly with non-homogeneous IQ as reported in literature (Brotto et al., 2017).

Despite the different systems available to identify students with a gifted profile, they remain largely invisible in the context of Italian schools: In the school where this study was carried out, only 1 out of 1500, 3 to 13-year-old students present in September 2020 had been formally identified as having a gifted profile. This figure differs from that set out by the guidelines of the Italian National Council of the Order of Psychologists, which indicates the presence of giftedness in about 2% of the population.

In Italy, the Ministry of Education asserts that, in case of need or difficulty, a personalized learning plan should be drawn up (DM_254_2012; *Nota Ufficiale 562*, 2019); this also applies to gifted children. This situation could reflect the legacy of Italian inclusion with a clear vision of compensation and openness towards situations considered to involve deficit (d'Alonzo, 2008, 2012, 2019) as well as the many preconceptions about giftedness which can be found in the absence of teacher training (Pinnelli, 2019; WCGTC, 2021; Winner, 1996).

This research presents a case study developed within a specific, real-life school context. The purpose of this study was twofold:

a) To build, through a highly qualified educational course that saw the full involvement of teachers, professional skills that favored the identification of gifted students in class by the teachers themselves.

b) To explore and experiment with a variety of educational and didactic tools with the group of teachers that would allow them to look at their students through the lens of resources and potential, also supporting the identification of gifted students.

The identification of students with high potential is seen as responding to a principle both of wellbeing (International Classification of Functioning, Disability and Health, 2001) and of all-round inclusion; it implicates acceptance of diversity while respecting everyone's right to learn (Dell'Anna & Marsili, 2022; Tomlinson, 2001, 2005; Tomlinson & McTighe, 2006; Salamanca Statement and Framework for Action on Special Needs

Education, 1994). As Bocci (2021) reminds us in a reflection on special pedagogy in comparison to inclusive pedagogy,

> Special Pedagogy has made, and—just like Inclusive Pedagogy—will continue to make, an extraordinary contribution in/for its ability to anticipate its time and to act as a driver of change; to be/act as, in a heuristic sense, an area open to innovation, while balancing the social need for change and the rigor of the scientific response to these stimuli; and to be/become a Pedagogy capable of welcoming (that is, immediately intercepting) instances of complexity, and of facing them (and inhabiting them) in an original way, rigorously identifying and setting out problems and trying to provide contingent answers but, also, being able to look towards the future (2021, p. 47).

The world of education is considering the development of socio-emotional skills more and more in recent decades; it constitutes an integral part of the concept of wellbeing of children (Thomson et al., 2018). Social adaptation, which corresponds to a primary need of school-age children, is also an indication of individual wellbeing (Reffieuna, 2003). According to Sclavi (2020) in school, attention is paid to both cognitive and social development, and Reffieuna (2003) highlights how peer group relationships can enhance children's reactions to school subjects and mutual relationships, both positively and negatively. Moreno's sociogram (Moreno, 1964; Reffieuna, 2003), which is easy for teachers to apply, highlights the dynamics within the peer group, allowing a precise observation of the class group; this can be followed by qualitative reflections. Social aspects are always relevant to school-age children and are often the subject of study, also for gifted children. Gifted education is full of misconceptions about the emotional aspects of children with a gifted profile (Lucangeli, 2019; Siaud-Facchin, 2012; Terrassier & Gouillou, 2016; Winner, 1996; Zanetti, 2017) as well as about the importance of supporting emotional development for full maturation: “Taking a lifespan perspective, it is speculated that the form social giftedness takes in childhood and the influences that direct it (teachers, parents, peers, mentors) have profound implications for its ultimate realization and contribution to society” (Porath, 2000, p. 211). The willingness of teachers to listen to the perception of peers has been added to these literature-based considerations, with respect to both social issues and academic performance.

Creativity is often a difficult element to consider in schools, and teachers are confronted with the original behaviors of children thanks to an unexpressed

knowledge which is not necessarily linked to scientific elements (Sironi, 2005). The approach to creativity in schools often does not facilitate the expression of unusual behaviors or different functioning, opening the door for different possible interpretations which perceive such traits as inadequate: "...too many students think that they are the problem, that they are not really intelligent, or must have difficulties in learning. Some people do have learning challenges and may need special support. For many others, the problem is not that they cannot learn but how they are required to learn" (Robinson & Aronica, 2016, p. 78). Creativity is often considered to be among the characteristics of gifted children, in the various declinations of fluidity, flexibility and originality as well as being considered a powerful resource for resilience and wellbeing (Bottari et al., 2017; Lucangeli, 2020; Mormando, 2011; Winner, 1996).

2. Method

The methodology chosen was action research with a strong focus on teacher training, intending to build on their professionalism and to have implications beyond the time of the research (Asquini, 2018; Kanizsa et al., 1998) in relation to both the research topic—that is, giftedness in the school context—and the research methods and tools. This last aspect is important to maintain motivation even if no gifted pupils were identified in the classes.

The complex, articulated research process has been described in *Impact of Teachers' Education on the Gifted Profile* (Chapter 1). In this section, the steps followed towards the possible identification of pupils with a gifted profile within the school will therefore be described chronologically. Because of the link between teacher training (objective A) and experimentation (objective B), the tools and results that emerged are presented in the same section.

Due to research methodology and specific teacher hesitations, our research questions are very broad:

a) To what extent can a high-level educational and accompaniment course support teachers in identifying students with a gifted profile in their classes?

b) To what extent can the triangulation of different educational and didactic tools prove effective for the identification of giftedness by teachers?

2.1. Location and Participants

The research group for the school year 2020–21 was made up of 20 teachers: 3 from preschool, 9 from primary school, and 8 from middle school. Amongst them, 17 were curricular teachers and 3 were special needs teachers. In the second year—that is, 2021/22— 17 teachers were involved, principally because of the end of the school cycle. The research idea was proposed to all teachers and participation was voluntary. The investigation was conducted in 25 classes in the school year 2020–21 and 24 classes in 2021–22.

During the first meeting with the research team, teachers declared an awareness of their lack of skills and training in both identifying and supporting pupils with gifted profiles.

2.2. Materials and Research Method

Following action research methodology (Asquini, 2018) teachers presented selected tools in class and, with the research support, worked out scorings. All primary data were examined qualitatively, in reference to both a single student and the class as a group. Three main tools were used: (a) sociogram; (b) creative test; and (c) giftedness checklist. These provided pictures that have been critically analyzed and interpreted by the research team involved with students. Teachers constructively built knowledge of their students starting with their informal assessment and adding more information to each phase to get a broader knowledge and deeper understanding of relationships. Through this pragmatic approach, supported by the tools used, every teacher nominated students with a possible gifted profile in their class. The researcher contacted families whose children had been nominated to further explain the joint research with the University of Modena and Reggio Emilia, offering the opportunity to undergo further investigation through a psychometric test thanks to a partnership with the Sapienza University of Rome.

Families were informed about the research in the participating class before any interventions; along the way, teachers and researchers were available to respond to

any questions or doubts. Information relating to the identity of children has been kept within the research team, mainly with the teachers working with that class. The results of the cognitive tests were provided directly to parents to respect privacy and their freedom to share the outcome with the school.

2.3. Process

During the first meeting, the following goals were established: (a) to identify tools to see the class from perspectives beyond subject performance; (b) to determine the kind of existing relationship in class; and (c) to establish whether a gifted child's learning style is different from that of other students in the class.

The literature of reference for gifted education was established to be within the paradigm of differentiation and inclusiveness (Dai & Chen, 2013). It was agreed that the Italian school is unique and stands alone, that it mirrors our society, and that the school also needs to inspire the right attitude to cultivate community across differences; therefore, mainstream education was to be the ground in which to develop teachers' and students' skills without denying any specific right to learning.

3. Results and Findings

The starting point was the verification of any documentation in the school secretariat of special educational needs. Only one pupil with a gifted profile, who was in the second year of middle school, had been identified in 2020-21. The documentation of special educational needs almost never reported the results of cognitive tests but instead highlighted, above all, socio-economic or linguistic problems of new arrivals at the school. As far as records of specific learning disabilities are concerned, there was always a cognitive reference but often with only partial data, and in no case was double exceptionality (2e, i.e., gifted profile with learning difficulties) highlighted by the professional, even in the face of rather high partial IQ results. The archive relating to disability was not analyzed. Table 6 shows the data that emerged from the first analysis of the school archive.

Table 6— *Record of students identified as gifted at the beginning of the project.*

School records had identified only one student out of 1500 as gifted at the beginning of the project.

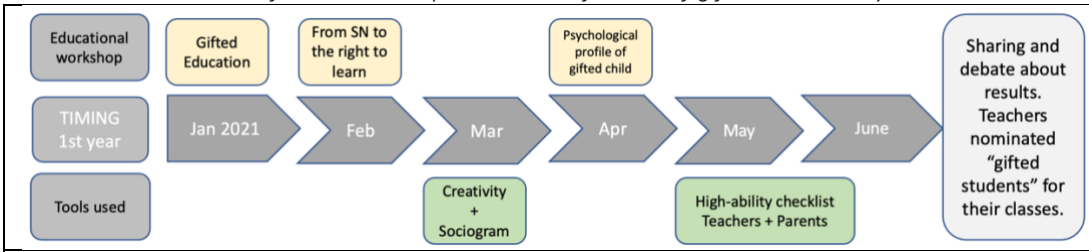
	GIFTED	SPECIAL NEEDS	LEARNING DIFF.	DISABILITY
School year 2020–21 T0	1	None with IQ test	No 2e children	Not checked

Note: among special needs students in Italy, legislation identifies 3 main groups: disability (for which a support teacher is foreseen); learning difficulties (such as dyscalculia, dyslexia, and ADHD, for which a support teacher is not foreseen); and generic special need (which can be a temporary situation that may require support, such as low socioeconomic status or parental separation). This last group is very wide and also includes gifted children.

During the training, creativity and relationships between peers emerged as important elements in getting to know the class group and learning dynamics. These were therefore the first tools requested by teachers and applied to the class in 23 classes of the school. At the end of the first year of theoretical training (i.e., online seminars), a checklist involving teachers and parents was used. Figure 7 shows the timing of teacher training and classroom interventions.

Figure 8 - *Teachers' Education And Tools Towards Identification.*

From observation of the class to a possible identification of gifted students by teachers.



Note: For the creativity test the TCD-AS Short Version[13] *was used; for the sociogram the Moreno supported by Reffieuna*[14] *was used; for the checklist to identify high ability, the Italian Fabio checklist*[15] *was used.*

The above considerations led to the choice of tools used to look at students through different lenses: The importance given to social adaptation and acceptance explains the choice of Moreno's sociogram (Moreno, 1964; Reffieuna, 2003), and the TCD-AS Short Version (Moretti & Biasi, 2017) was selected to stimulate teachers' reflections on creativity. The need for application to the class group and for easy administration and

[13] Moretti, G., Biasi, V., Giuliani, A. & Morini, A. (2017). Development of problem solving skills in lower secondary school and logical-linguistic and logical-mathematical learning. Adaptation and validation in Italy "of the short version" of the "Creative Personality" Test (TCD-As) | *Italian Journal of Didactic Research*, Special issue*, Year X,* 115-128. (Moretti & Biasi, 2017)

[14] (Reffieuna, 2003)

[15] (Fabio, 2019)

interpretation by teachers also contributed to these choices. The final tool used was a giftedness identification checklist, namely the *Italian standardization of teacher and parent screenings for identifying gifted and talented children aged from 6 to 13* (Fabio, 2019). It was applied as a litmus test with respect to the informal nominations that teachers had made in the first months of training and as a tool to gather the perspectives of families (especially in the case of non-native Italian-speaking children, it was very important to grasp the linguistic competence in the home language). This checklist has been selected amongst the existing scales validated in Italy, with open-access, applicable by teachers on the whole class. This tool has been hypothesized to stimulate reflection on the behavior of children and young people both by teachers and families. It also had the great advantage of covering the age groups of both primary and secondary schools.

At the beginning of the second year of research teachers nominated pupils in their classes who could have gifted profiles; therefore, this first project result was shared with the families. Families were offered the opportunity to have the nominated children take the WISC-IV cognitive test to validate teachers' hypotheses. The test also played an important role for teachers in confirming their hypothesis. Therefore, in September 2021 according to the screening of teachers and from an in-depth analysis of some secretarial files, the school had among its students 1 identified gifted student, 68 teacher-nominated gifted students, and 8 possible double exceptionalities (as illustrated in table 7).

Table 7— *Gifted Student Identification, September 2021*

Table shows results of the process of identification after one year.

	GIFTED	NOMINATED BY TEACHERS	TWICE EXCEPTIONALS
September 2021 T1	1	68	8

Notes: teachers' nominations were also shared with parents and a cognitive assessment by a professional was proposed. The double exceptionality emerged from a scrutinization of files, giving priority to the IAG or also considering a partial value of the WISC-IV of around 118 in the presence of a learning disorder[16]*. In all cases of certification, only the disorder was mentioned*.

[16] Reference was made to the impact of learning disability on test performance (Brotto et al., 2017)

During the school year, several cognitive assessments were carried out through WISC-IV, which involved the following: (a) 17 children identified by the teachers; (b) 4 siblings nominated by parents after listening to the motivations of the research project at school (whose classes were not part of the experimentation); (c) 4 twice exceptional students involved in the project; and (d) 1 student already identified 3 years before. All children, nominated by teachers, to whom the WISC-IV test was administered scored above 130 IQ or 130 GAI (General Ability Index) only 2 children nominated by parents had these indexes above 120, which could be seen as a confirmation of their high abilities in a school context. It is important to emphasize that the profiles in which the identification took place only from nomination by teachers only 2 present double exceptionality. At the end of the second year of experimentation, the school had been able to confirm the giftedness profile for a total of 27 students (including only 3 twice exceptional students, in addition to those already present in the school archives) – see Table 8.

Table 8 - *Gifted student profiles confirmed by WISC-IV cognitive test.*

WISC-IV cognitive test confirmed the gifted profile of 27 students as assumed by teachers or family.

	WISC CONFIRMED PREVIOUS PROFILE	WISC CONFIRMED TEACHERS' NOMINATION	WISC CONFIRMED PARENTS' NOMINATION	TWICE EXCEPTIONAL
SY 2021/22 T2	1	19	4	3

Note: for several reasons many nominated students did not undertake a follow-up cognitive test. However, 100% of students tested that had been nominated by teachers confirmed the profile with the WISC-IV cognitive test.

4. Discussion

Machts et al. (2016) highlighted that "For the potential development and the use of cognitive abilities to unfold, attention and skill within the educator are required". The recognition of the qualities and characteristics of each pupil allows them to feel respected and reflects the concept of an inclusive classroom (d'Alonzo, 2019).

The identification of pupils with a gifted profile in this research had the dual objective of supporting teachers' training in the ability to observe their students through an adequate lens, as well as to understand which pedagogical and didactic interventions could respect the learning of each child.

There has been debate about the appropriateness of labeling students, discussing whether it is better to place an extra label on the student or on programs and projects as recently suggested by researchers (Borland, 2005; Renzulli et al., 2021; Sorrentino & Pinnelli, 2021).

Teachers' professional development is an important topic. During this specific practitioner research, value was placed both on educational experience related to the topic and on previous international experience; at the same time, it was also intended to merge with practical classroom experience, leveraging on teachers' experiences both past and present. This view implies teachers' capacity to continue their professional development based on their values (Dickson & McQueen, 2018).

The teachers, however, considered this educational course a valid indicator; this resulted in the acceptance of the position of researchers who attribute value to the context, motivation, creativity, executive functions, and knowledge of the group using a plurality of instruments (Gagné, 2010, 2018; Renzulli et al., 2021; Renzulli & Reis, 2018; Zappella, 2021; Ziegler et al., 2017). The use of tools that pay attention to social (Moreno's sociogram, (1964), creative (TCD-AS Short Version - Moretti & Biasi, 2017), intellectual, and relational aspects (the checklist: intellectual, creative, and social ability, Fabio, 2019) has allowed teachers to be supported gradually in the path towards observation training. Checklists are a practical tool and have proven their effectiveness, especially when compiled by teachers compared to parents (Harder et al., 2015) in this context, identifications by teachers also confirmed their ability. It should be specified that profiles have emerged without double exceptionality. In the case of double exceptionality, due to the hesitancy of the teachers, it was necessary to compare it with cognitive tests, as is the case to certify a learning disability in accordance with Italian law.

The search for multi-criteria for identification guided the observational spectrum of teachers, and in the training–learning path built on the skills that allowed decisions to be made by combining the results of the tools. As Renzulli recalls, "decisions are made by people and not by tools" (as cited in Sorrentino & Pinnelli, 2021, p. 16); during the study, teachers seemed to gain more and more confidence to advance hypotheses,

eventually affirming at the end of the two years of research, “now you see them, you realize it” (from the in-depth interviews with middle school teachers). This was also an opportunity to relaunch the professionalism (Vannini, 2018) of teachers towards families: teachers communicated an entirely new matter to families. From communications with parents, families received information about their children and the school beyond the child’s curricular performance.

Several limitations were encountered during this study:

a) Due to restrictions that were put in place during the COVID-19 pandemic, all theoretical meetings happened online through Google Meet.
b) In some cases, classes had to drop out of the research or a new teacher had to be supported by other teachers in the second phase of the research (which occurred in two cases) due to turnover of teachers: some were substitute teachers, and others changed classes either due to end of cycle or support teacher status.
c) After the first year, there was a change of headteacher; the new headteacher did not offer the same level of support to the research project as the previous one, but as it had been officialized as a 3-year project it could still be seen through to its end. In this case the previously established positive personal relationships with teachers in the school were a key element in the project’s success.

Practical implications strictly related to this step of the research impact the educational community. These findings suggest that Italian teachers, when educated on giftedness and supported in a path towards identification, can scout out students with a gifted profile. Teachers demonstrated care and professionalism that was noticed by families throughout the educational and action program, reinforcing the important school-home relationship (Nigris, 2018). Identification in this context has represented a milestone for some children for a better understanding of themselves: “It has been useful to better understand who am I and strive towards a better knowledge of myself,” explained a 13-year-old student after sharing the main results of the cognitive test, 30 June 2022. At the school level this work also unveiled the often-concealed profile of

twice exceptional students, with both new identifications and a better interpretation of information already stored in school records.

5. Further Research and Conclusion

An area of research to elaborate upon in terms of the path towards identification is certainly in relation to preschool: no preschooler in this case study received a clear nomination from teachers. Possible reasons, that arose during interviews with infant schoolteachers include (a) the developmental vulnerability typical of the age group and the strong influence of the family context on children's skills, (b) the high turnover of pupils in the specific school, and (c) the absence of tools to support the spontaneous observations of teachers. These hypotheses are aligned with the strong influence of culture and education on children's development (Dimnet, 2021) and with the uniqueness of the attention given by the Reggio Emilia Approach to a pedagogy of listening and supporting documentation versus observation based on a given grid (Rinaldi, 2009, 2017)

A second area that would need further investigation is the impact at a personal level for students with a clear identification vis-à-vis their self-esteem and approach to schooling. Quoting one student with a gifted profile, "I think I am a person that underestimates himself and this causes much insecurity in life and with my personal decisions" (30 June 2022, on an anonymous padlet completed at school). This is an aspect often mentioned in literature (Mormando, 2011; Zanetti, 2017).

Ultimately, in order to give continuity to the present pilot study, it would be important to verify the effectiveness and validity of the tools used—i.e., sociogram (Reffieuna, 2003), creativity test (Moretti & Biasi, 2017), and checklists (Fabio, 2019)—on a larger sample of classes and teachers.

In conclusion, this investigation confirmed previous international research on the ability of teachers to identify students with gifted profiles, building upon a base of solid training and experimental activity in the classroom.

The research group was an element that greatly contributed to the success of this intervention because it had the strength to counteract the many prejudices existing among those who have not received specific training. Teachers, during the in-depth interviews, mentioned that the presence of the researcher at school and the great availability of formal and informal meetings with teachers, families, and students played a key role in adhesion and coordination (Bondioli & Donatella Savio, 2018); this is aligned with literature about teacher research where sharing a project, allowing room for reflecting, and keeping the focus mainly on impacts in the school are key drivers to a community research project (Asquini, 2018). An element that could have facilitated and optimized the results is a collaboration with the territorial structure of neuropsychiatry that evaluates both learning disorders and ADHD; that is, collaboration to improve the professional exchange between pedagogical knowledge and psychological knowledge. This has already happened in the past with special pedagogy and it is still suggested by Zappaterra (2019) to broaden the professions involved in a complex area.

Identification in school has been a starting point to work on a pedagogical and didactic proposal to the class with a wider inclusive panorama.

Appendices: ref. A-B) Moreno's sociogram questions for primary and middle schoolers;

ref. G) Fabio's Checklist to identify gifted students.

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CHAPTER 3 Exploring Pedagogical and Didactic Feedback for an Inclusive Classroom

1. Theoretical framework

When discussing inclusive education in Italy in 2023, it is important to consider the long road that has led to achieving one school that "meets" the needs of all students. A National Law introduced in 1977 (L. 517, 4 Agosto 1977) ruled that public schools must welcome all students without any discrimination based on background, languages, disabilities or any learning difficulties. This meant opening the door to a pedagogical model that values education in and of itself rather than a specific curriculum, learning to grow and develop the self. It is accepted nowadays that it is possible to develop one's skills only within a group and not in isolation, and classmates provide this educational enrichment companionship (d'Alonzo, 2008). Integration of children of all backgrounds at school meant the development of new interactions not only in class but also between several professions—first and foremost psychiatry and psychology—and training and development of new teachers, special needs teachers, with prior experience of attending to a child with disability but also responsible for the class development as the curricular teacher (d'Alonzo, 2008, 2019b; Ministero dell'Istruzione e del Merito, 2022).

To move towards inclusiveness, it is important to reflect on milestones that helped Italian schooling to become an educational model (Ianes et al., 2020). Italy kick-started the integration of students with disabilities in schools, including children who are used to a different type of instruction and curriculum as well as a life project based on oneself (Ianes et al., 2020). Special education started focusing on the individual, adding the element of a rich context. Trying to fulfill the need to feel *part of a group* upheld the research in accommodating each student within a class, and every child in the world (d'Alonzo, 2008). This vision offers a much broader view than merely providing an academically simplified lesson to convey content. Special education has been the discipline that created a dialogue with different areas in order to translate theory into action in the school context (Zappaterra, 2019). This process has faced several challenges generated by barriers such as stereotypes, prejudices, fear, and impotence, to name just a few. The response of scholars to all these challenges and to this unique context has always needed a fully qualified professional teacher (d'Alonzo, 2008, 2012, 2019b); the Center for Applied Special Technologies (CAST) envisaged the possible increase in inclusiveness through a change in didactics for all, using different methodologies and tools. Based on this idea, the Universal Design for Learning was

developed to support teachers (d'Alonzo, 2019b). These few steps highlighted the necessity within the class for flexibility, creativity, focus on personal development, acceptance of differences in class, high professional skills, and personalized assessing tools.

In relation to giftedness education, some key elements have been highlighted; specifically, background studies have focused on differences within mainstream education and non-negotiables. Criteria have been exacted by the work of Shore (2000), VanTassel-Baska (2005) and VanTassel-Baska and Stambaugh (2005). There is a need for particular attention to metacognition (monitoring, evaluation, and control of thinking strategies) and its connection to flexibility and accuracy:

> The inflexible gifted children demonstrated less metacognitive knowledge than flexible gifted children and […] at all speed, inflexible average children had less metacognitive knowledge, but slower, flexible nongifted children indicated greater metacognitive knowledge; […] accuracy demands self-monitoring of performance and, on occasion, corrective action (Shore, 2000, p. 173).

These scholars also recommended keeping some elements of the curriculum aligned with the class and at the same time guaranteeing differentiation and opportunities for different groups to exercise interactions. Differentiation should be enacted by a competent teacher who understands the varied needs of the class, and specifically the needs of those with a gifted profile. VanTassel-Baska and Stambaugh specifically mention *barriers* that could occur while addressing differentiation:

> a) degree of differentiation required, b) need to provide advanced learning opportunities beyond grade level, c) philosophical barriers and antipathy of many teachers towards the gifted learner and their needs, d) lack of understood services for the gifted population, and e) lack of services for gifted learners leading to greater neglect (VanTassel-Baska & Stambaugh, 2005, p. 212).

A qualified teacher is key not only to address appropriate differentiation but also to offer an equal and equitable level of instruction, including selecting assessment tools and focusing on the most appropriate educational goal in that specific situation. To stimulate thinking skills, the curriculum should reflect complexity, important issues, and enough creativity to provoke a variety of responses. Suggested methods include problem/project-based learning, the regular usage of rubrics to assess, and, possibly,

involving expertise from within the educational community beyond the teacher (VanTassel-Baska & Stambaugh, 2005).

In mainstream education, the comparison between gifted and special needs education faces common challenges: heterogeneous classroom with several needs, different learning paces, and diverse pupil interests (d'Alonzo, 2019c; VanTassel-Baska & Stambaugh, 2005).

This research is a case study (Shaughnessy et al., 2020) that has been proposed to create a touch base in class, with theory provided during the educational seminars of the main action research (see Chapter 1). It aims to provide support and encouragement to teachers, but also to pay attention to observations that could arise in class and teachers' competence in documenting the learning path (Kanizsa et al., 1998).

Teachers could recognize needs based on the theory presented to them, but also express the need for didactic strategies not yet in place in the school that could meet learners' requirements.

This study has been developed within wider action research about giftedness in an Italian state school in Parma (see Chapter 1) to explore possible didactic responses that could serve children with different learning needs while still respecting the right of every child to learn. Teachers involved in the research expressed concerns about:

a) Having an increasingly mixed classroom to manage and serve, with clear teacher awareness of an unsatisfied need.

b) Having the right expertise to be able to effectively observe and serve all children in class.

Elements considered to foster mixed abilities in class have been (a) critical thinking, (b) creativity, and (c) caring, as decoded by the group of teachers comparing several needs; this was previously expressed in the theoretical framework. Through these wider objectives metacognition and flexibility should be practiced, as well as the consideration of which elements to focus on for gifted children specifically (Shore, 2000).

1.1. Research questions and observations-

The goal of this specific research leg was to support teachers in class, in their own context and with their own pupils, to put theory into practice (*European Commission*,

2010; Ferguson, 2021; Kanizsa et al., 1998). It additionally aimed to identify and assess possible didactic tools not yet in use in the school that could enable enhanced inclusion.

The aim of this pilot investigation was to understand if the provision of accompanying teachers' education while they explore didactic tools would have a useful implication on the school's inclusiveness and/or on professional development.

Three key areas were investigated in terms of achievement and challenges:

a) To what extent does practice in class enable teachers to observe and act based on a recently learned topic?

b) To what extent does a child-centered pedagogy improve pupil observation and understanding?

c) To what extent are tools that were originally developed for specific children's profiles helpful on a wider scale, reflecting more inclusive teaching?

1.2. Didactic Hypotheses

The didactic hypotheses to be explored and tested in class were divided according to students' age:

a) Preschool: Philosophy for Children (Lipman, 2005);
b) Primary School: Philosophy for Children (Lipman, 2005), Making Learning and Thinking Visible (Mughini & Panzavolta, 2020; Project Zero & Reggio Children, 2009); Differentiation (d'Alonzo & Monauni, 2021; Tomlinson, 2005; Tomlinson & McTighe, 2006);
c) Middle school: Tools to develop pupils' self-awareness, both in terms of learning strategies and cognitive and emotional self-awareness, in order to possibly co-construct a personalized individual plan (Goleman & Senge, 2017; Johnson et al., 2016; La Prova, 2015; Sclavi & Giornelli, 2020; Sunderland, 2013).

Motivations for these choices will be highlighted further in the intervention section.

2. Method

This teacher research study wants to face methodological questions and build on professionalism that could lead to autonomous decisions in the future (Vannini, 2018). The interventions proposed are experimental with a strong empiric implication. A thematic analysis was proposed with participating teachers to interpret the patterns

and meanings in children's feedback. The researcher interpreted in-depth interviews working on a content analysis using MAXQDA software and coding based on key areas of investigation.

2.1. Population

Interventions were divided according to school grade:

a) Preschool: two classes of five-year-old children

b) Primary school: one second-grade class (seven years old) and two third-grade classes (eight years old)

c) Middle school: individual self-awareness activities with pupils with a gifted profile.

2.2. Instruments

To collect feedback about interventions in classrooms, in-depth interviews were carried out with the most relevant teachers:

a) Middle school: two teachers, one who was responsible for special needs and one who was the first teacher to apply specific profiling tools to a whole class.
b) Primary school: two teachers, each with 2 second-grade class and 2 third-grade class (a total of four classes).
c) Preschool: all three teachers involved preferred to provide their joined written observations based on the brief interventions. The researcher decided to respect their desire to avoid a standard in-depth interview.

3. Interventions

In this paper, didactic methodologies will not be explained in detail, but references are instead provided to allow a deeper understanding. The goal for this specific publication is to provide reasons why some tools have been considered potentially interesting to assess and experiment with, and what kind of intervention was enacted in school. Each intervention was proposed as a standalone activity and had the goal of giving a taste of its impact and collecting teachers' and students' reactions, to be eventually further explored with a specific teachers' educational activity.

3.1. Philosophy for Children Combined with a Workshop

In 1968 Lipman envisioned the possibility of “teaching children to reason” (Lipman, 1976, p. 17) and in the following years developed the well-known Philosophy for Children, abbreviated to P4C (Santi, 2016).

A key element that the group of teachers highlighted about the P4C was the fact that, through a community of inquiry, three dimensions were fostered: critical thinking, creativity, and care (Lipman, 2005). It was supported by the fact that it could be proposed to the class without foreknowledge; furthermore, it could be feasibly linked to a creative workshop, so it was seen as a good fit for the youngest children in infant school and lower primary.

To use this methodology, teachers need a special and accredited course; therefore, expert Sofia Antoniello (Teacher Expert in P4C, University of Padova) and teachers took on the role of documenting and observing their own students while learning. This new figure in the school was a PhD fellow qualified in P4C methodology who supported the planning and implementation of the philosophy session with the support of the researcher. In order to facilitate a smooth induction, a meeting was held to share key aspects of each class and ideas about documentation in a mild Reggio Children vision (Dahlberg et al., 2007; Edwards et al., 2017), including drawing attention to the process of discovery and learning of some children, as well as to agree on topics of discussion. There was a specific focus on the group as a learning environment, with a connection made between individual and group learning processes (Project Zero & Reggio Children, 2009/2001). Starting from the multiple intelligences of Gardner (1983/2021), the teachers’ group determined areas to be explored: interpersonal, logical–mathematical, linguistic–verbal, and naturalistic. A creative workshop was added to this after the philosophical discussion to offer an alternative form of expression to children on top of verbal contribution (Zorzi & Antoniello, 2020). Every session started with reading aloud a picture book, followed by community discussion and then a creative workshop. Community discussion began with a question presented by a small group of three to four children to the class; the most interesting questions were then selected and discussed. The whole class was always involved. In the preschool, only the group of five-year-olds participated. The P4C expert and the researcher had the objective of fostering

generative questions to enable the observation of possible gifted attitudes. Table 9 reports interventions.

Table 9 – *P4C Interventions and Creative workshops.*

Summary of interventions involving P4C and creative workshop

Intelligence	Class	Picture book	Creative workshop	Date
Interpersonal	Infant class 1	Guizzino (Lionni, 1977/2006)	Agree on a symbol to represent the community using four watercolors and vegetables and hands.	10.02.2022
	Infant class 2			18.02.2022
	Primary,2°			11.02.2022
Logical–mathematical	Infant class 1	Tu (non) sei piccolo (Kang & Weyant, 2019)	Create a personal avatar using only black and white paper.	10.03.2022
	Infant class 2			11.03.2022
	Primary, 2°	Conta su di me (Tanco, 2021)		18.02.2022
Linguistic–verbal	Primary, 2°	La grande fabbrica delle parole (Lestrade, 2018)	Write a sentence made of one word drawn by a lot of invented words, and of two words drawn by a lot of favorite words written by classmates. Paint it.	11.03.2022
Naturalistic	Infant class 1	Saremo alberi (Evangelista, 2010)	Make a tree using salt dough and natural elements.	18.03.2022
	Infant class 2			17.03.2022
	Primary, 2°		Make a 3D tree with wire and natural elements.	18.03.2022

Note: Primary school workshops used a room different from the classroom, while in infant school they were carried out in their main classroom.

Both classes 1 and 2 of preschool had an average workshop size of about 10 children; for primary school the class was made up of about 18 children. Teachers welcomed workshops and experts in the class, and a strong dialogue was maintained throughout the research.

3.2. Making Learning and Thinking Visible (MLTV)

Visible Thinking was a distinctive element of the Reggio Emilia Approach that allowed very young children to find meaning in their learning activity. Listening was coupled with curiosity, desire, doubt, interest, and emotion; learners were listened to, and their learning process was monitored (Rinaldi, 2009). One of the roles that documentation has had is giving voice and value the thinking process both in a learning group and individually, allowing the possibility to reflect on the metacognitive process of a specific learning journey (Rinaldi, 2009). In schools there is often a specific focus on individual

results and goals, while in this case the focus was on interactions within a learning team and constructive interactions (Seidel, 2009).

The Reggio Emilia Approach, although very inspiring, was developed in nursery and for this reason needed a framework to be adapted for use in primary and middle schools. In Italy, the "Avanguardie Educative" project from the National Institute for Documentation, Innovation and Educational Research (INDIRE[17]) adapted the MLTV from Project Zero[18] for Italian upper secondary schools through participatory research (Mughini & Panzavolta, 2020). Through the learning group, cognitive processes are supported, encouraging the development of critical thinking. Additionally, motivation in learning is fostered through engagement, curiosity, challenge, and supporting self-efficacy (Mughini & Panzavolta, 2020). Supporting thinking and comprehension is key in a learning process, but some *thinking routines* are perceived as more natural for someone and yet not necessarily effective. It is therefore important to teach flexibility and alternative routines, often suggested by another student in the group (Ritchhart & Church, 2020). These key elements were considered to offer the opportunity for students and teachers to learn and possibly focus on the process rather than the outcome.

The researcher and an external expert proposed two activities for the second grade of primary school: one with a group of six pupils nominated by teachers as potentially gifted ("See, Think, Wonder" routines) involving only the pupils and the researcher, and one joined-class activity with the two second-grade primary classes ("Color, Symbol, Image" intervention) where the class teacher was present (see table 10).

Table 10 - *Interventions with MTLV - Thinking Routine.*

The table presents interventions in two second-grade primary classes and a pull-out activity with 6 children nominated by teachers as having a gifted profile.

Group	Date	Thinking Routines	Stimulus
Small group (6 children)	15.03.22 and 22.03.22	"See, Think, Wonder" (PZ – Harvard)*	Realia: Rose of Jericho
All class (class 1 and 2)	28.03.22 Class 1 30.03.22 Class 2	"Color, Symbol, Image" (PZ – Harvard)*	Picture book: *La lezione degli alberi* (Parmeggiani & Palumbo, 2018)

**Note: Thinking Routines "See, Think, Wonder" and "Color, Symbol, Image" were developed by Project Zero – Harvard Graduate School of Education (https://pz.harvard.edu) and translated into Italian and adapted by Panzavolta (Mughini & Panzavolta, 2020).*

[17] Istituto Nazionale Documentazione Innovazione e Ricerca Educativa
[18] http://www.pz.harvard.edu/projects/visible-thinking

3.3. Differentiation

Tomlinson introduces differentiation as a way of addressing learners' variance in school: "[The] norming and sorting process may earmark students as *different* […] [An] alternative to fragmentation for *some* students is the creation of classroom in which human differences are valued and provided for" (2004, p. 516). This definition captured participating teachers' attention, and a specific online webinar held by Monauni (see Chapter 1) addressed key elements of the methodology itself (d'Alonzo, 2019a; d'Alonzo & Monauni, 2021; Tomlinson, 2005; Tomlinson & McTighe, 2006).

The key aspect for which research teachers wanted evidence was student "readiness": both as a starting point to value the process of learning, and to be able to offer an education based not on "one size fits all" criteria but on children's specific needs. This element allowed teachers to assess prior knowledge and to utilize this information to differentiate content, process, and/or production (d'Alonzo & Monauni, 2021; Tomlinson, 2001).

Understanding the starting point of students' readiness also allowed teachers to better come to terms with the preconcept of "norm" (d'Alonzo, 2019a) that had been ingrained during the teachers' education process; a learning path is very personal, and it is not possible to plan a "normal way" on which to base a lesson (Chapter 1).

The intervention focused on *making visible* the different starting points (*readiness*) of students when facing a new topic in geometry in two third-grade primary classes, as shown in Table 11. It was conducted by the class teacher in both classes, and the researcher was an observer in class.

Table 11 – *Students' Readiness in Third Grade Primary*

Readiness in the third grade of primary school using Frayer diagram.

Class - date	Tool	Enacted by	Topic
Grade 3 Primary (class 1)	Frayer	Class teacher	Area (geometry)
Grade 3 Primary (class 2)	Frayer		

Note: Both classes shared the same mathematics teachers. The activity proposed was the introduction of area, a new geometry topic.

3.4. A Student Profile: Going Beyond the Cognitive

In Italy, pupils with learning difficulties are provided with a Personalized Learning Plan (PLP; PDP in Italian) to compensate for additional challenges they could face in

school (Linee Guida DSA - MIUR, 2011). In April 2019, the Ministry of Education included students with a gifted profile within the category of students with Special Educational Needs (SEN; Bisogni Educativi Speciali, BES), which entitled students with a gifted profile to be provided with a PLP if there was such a need (MIUR Nota Ufficiale 562, 2019). This *compensative* view does not leverage on capabilities, interests, and desires of students, which is particularly important in the case of gifted children (Sannipoli, 2019; Sorrentino, 2019). Therefore, a document that was initially intended for learning difficulties is now to be adopted for gifted children, requiring teachers to decide how to adapt it. The Ministry of Education's guidelines for learning difficulties (Linee Guida DSA - MIUR, 2011) specified that learning styles and strategies are different for every person and that it is especially important to be aware of them and to adapt the lesson accordingly. They also specified that personal circumstances need to be considered in the case of, for example, bilingual students: A personalized and individualized didactic approach is recommended to fulfil every child's right to learn. Additionally, thanks to the law on personalization of learning (*Legge 28 marzon.53, 2003*) consideration of the student's specific context, interests, potentialities, and talents assures the best development approach to pursue. Lastly, a voice is given to teachers and their quality relationship with the pupils, and not only the external professionals that diagnose learning difficulties using defined categories; this gives weight to the emotional aspect without medicalization (De Simone & Annarumma, 2018). This background in Italy follows the idea of the Total Talent Portfolio proposed by Renzulli, which has already been adapted in Italian (Renzulli et al., 2021; Sorrentino & Pinnelli, 2021), but working with mixed tools as a starting point for the PLP with the objective of getting the most out of the relationship with the students. In Table 12 all possible tools to complete the student profile are presented; the WISC-IV cognitive test is required to formally identify a student as gifted (CNOP, 2018), following national guidelines.

Table 12 – Tools to create a student profile and build understanding

Tools that supported student profiling and awareness of identified gifted pupils before writing a Personalized Learning Plan.

Area of understanding	Tools to support understanding	Submitted by	References	Individual – group / online - paper
Cognitive profile	WISC IV	Professional Psychologist	(Orsini et al., 2012)	Individual in person
Relationship in class	Moreno's sociogram	Class teachers	(Reffieuna, 2003)	Online – whole class
Relationship with others	"Personal ad"	Class teacher/ researcher	(Sunderland, 2013)	Individual paper
Learning profile	"Learning styles' questionnaire"	Class teacher/ researcher	(Mariani, 2000a, 2000b)	Individual paper (also as class activity)
Student's interests	"Six important places"	Class teacher/ researcher	(Sunderland, 2013)	Individual paper
Social and motivational aspects	"You and your shadow"	Class teacher/ researcher	(Sunderland, 2013)	Individual paper and dialogue
Social and motivational aspects	"Critic in your head"	Class Teacher / researcher	(Sunderland, 2013)	Individual paper and dialogue
Languages	"Linguistic biography"	Class teacher / researcher	(Carbonara & Scibetta, n.d.)	Individual paper and dialogue
Students' interests	How I feel when ...	Class Teacher / researcher	Created by the research group	Individual paper and dialogue
Favorite subjects	Favorite subject and why / Difficult subjects and why	Class Teacher / researcher	Created by research group	Individual paper and dialogue

Note: these tools have been used with students identified by teachers as potentially gifted, followed by WISC IV to confirm giftedness. The goal was to broaden student self-awareness and create a stronger teacher-student relationship. Participating pupils were in middle school (11- 13 years old).

4. Products and Interviews

4.1. P4C: Intervention

Philosophy for Children was trialed in class to potentially foster a community of inquiry effect in the group and to overall encourage a caring, creative, and critical environment. Preschool pupils were enthusiastic and zealous to attend and participated in workshops every week. Contributions brought some conversations further than any expectations: "How can you say that a shape is right or wrong?"; "If you do something with others you are happier!"; "The big ones are bullies". In Table 13, comments given by teachers after interventions have been coded to assess if the areas to be addressed had been evaluated. Community of inquiry was the area most evident to teachers. Class

should be a community of inquiry that promotes caring, creativity, and critical thinking (Lipman, 2005).

Table 13 – P4C Coded findings of infant teachers' feedback.

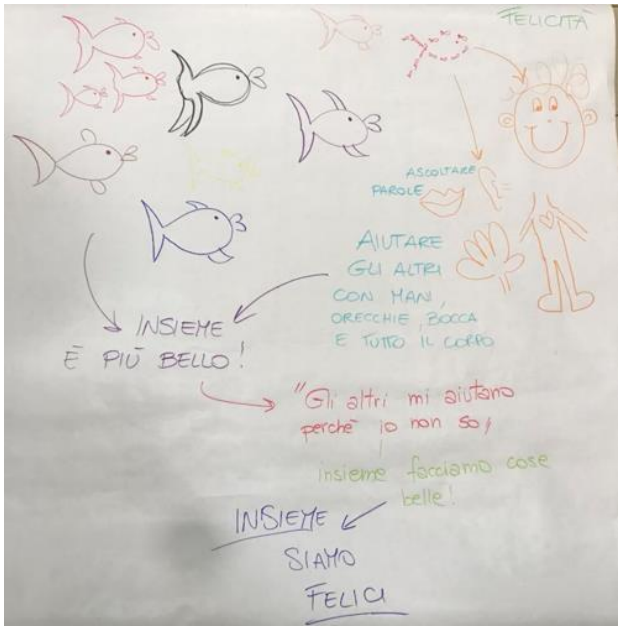
Coding of infant teachers' feedback by area of investigation.

Area of focus	Items	%	Example feedback
Community of inquiry	9	43%	"Attention and greater participation and concentration" "'New' behavioral and relational dynamics among children"
Critical thinking	6	29%	"Stimulated reasoning"
Creativity	3	14%	"Curiosity" "Originality and creativity"
Caring	3	14%	"He participated actively and with great enthusiasm, responding consistently and without fear"

Note: Feedback has been translated into English by the author for consistency and to convey meaning to readers.

Five-year-old infant school pupils also worked on creative workshops. Outcomes include the following Community Agenda (Fig 9).

Figure 9 - *P4C Community Agenda Infant School*



Infant School – first session based on the reading of "Guizzino" ("Swimmy" in English) by Leo Lionni. 10 February 2022. The community agenda keeps track of the thinking process of the group of children.

Figure 10 - *Avatar chosen by a child: "the infinite".*



Figure 11 – *"It's a tree and I am climbing it": a five-year-old child explains her work.*



4.2. MLTV: intervention

A class activity with the "Color, Symbol, Image" Thinking Routine: After reading *La lezione degli alberi* (Parmeggiani & Palumbo, 2018), pupils were requested to write their feelings on a piece of paper. Soon after, they were divided into small groups in which they picked out important concepts or questions from the story and then voted on their favorites. Pupils then had to assign a color, a symbol, and an image to each accordingly (see Table 14).

Table 14 - *MTLV "Color, Symbol, Image" thinking routine*

Sentences proposed and selected by the class to work on.

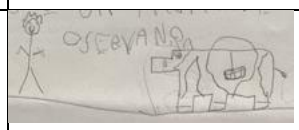
Sentences voted for by the class	Thinking routine request
It is unpleasant to not be able to talk.	Color
You are sad when someone makes fun of you.	Symbol
Why does Enrico ask so many questions?	Image: "if it were an animal, it would be…"

Note: The activity had 4 steps: (1) educator reads a book aloud; (2) in groups of three children, a question or a fact is highlighted and shared with the class; (3) the class votes on the three most relevant ones; (4) individual activity begins, associating a color, a symbol, and an image respectively.

A selection of pupils' productions follows in Table 15.

Table 15 - *MTLV "Color, Symbol, Image" thinking routine. Class activity, Second Grade Primary*

Grid of individual work produced by children.

Emotion	Color	Symbol	If it were an animal, it would be…	
After reading	It is unpleasant to not be able to talk.	You are sad when someone makes fun of you.	Why does Enrico ask so many questions?	Researcher's comments
Felice	Blu – perché brutto mi fa pensare un colore scurro	Pallone – Ho preso da calcio si è sgonfiato i miei compagni mi hanno preso in giro *(a voce "ed io mi sono intristito")* 	Perché il pesce parla perché il pesce fa bl bl bl	*This shy child makes a strong association between the story and his personal experience.*
Rilassante	Nero perché è triste	Ho messo la faccina lacrima perché prendermi in giro mi ratrista. 	Io ho messo umano perché fanno tantissime domande (a voce "l'uomo è un animale") 	*The emotion identified is relaxing for the activity although sadness is clearly associated to the story itself. As the animal symbol he names humankind.*
Provo felicità	Nero – perché e un colore un po brutto.	 Sole – Tristi significa esere felici (a voce "non si può essere tristi se non si è anche felici")	 Una mucca perché osservano molto "e sembrano voler fare tante domande"	*Profound thought of sadness and happiness as two sides of the same coin.*
Curiuosità	Ho scelto il blu perché è malinconico (a voce "è il colore preferito di mia sorella che spesso mi fa arrabbiare ed io poi divento triste")	 Ho scelto l'emoji che piange perché non è bello essere presi in giro.	Ho scelto il cammello perché (forse) dato che i cammelli molto spesso si addobbano e (forse) i cammelli si chiedono: come mi addobberanno? 	*Very rich vocabulary. Creativity is associated with a different culture.*
Comosa	Nero perche è brutto	Perche si è tristi (bambina che piange) 	Perche si chiede cosa faciamo cane	*Rich vocabulary.*
neutro	L'arancione fa un po' triste come il rosso	Lacrima 	Una scimmia perche le scimmie sono tipo umani come noi (a voce "l'uomo e l'origine comune con le scimmie") 	*Specific vocabulary taken by SEE Learning activity. Association of monkeys with higher category of humankind.*

Note: spelling reflects the original spelling presented by the children. Translation was avoided to preserve the richness of the children's authentic contributions.

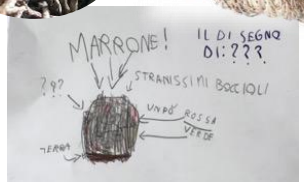
MTLV – Small group

The researcher proposed a breakaway activity to a group of six children who had been identified by teachers as possibly gifted. Children were from two different classrooms in the same grade. The pupils willingly accepted the challenge of discovering what an unknown object, in this case a Rose of Jericho, presented to them was.

The thinking routine suggested was the “See, Think, Wonder” routine, and in Table 16 the key first steps and children’s reactions are reported.

Table 16 - *MTLV "See, Think, Wonder" small group, Second Grade Primary*

Steps followed during breakaway activity with a group of six children.

Step Prompted	Children's responses:
INPUT REALIA	
I SEE… *(group observation + individually noted as well)*	A sort of ball – brown colour – a connection in the lower part, which is darker and less hard – a pile of branches – rough – colour shades of brown, green, a bit of grey and red – like a curled flower – inside there is some room – some leaves are green – small branches with dry leaves – needles – branches.
I THINK … (group observation + individually noted as well)	Broken nest – balled up pine needles – seaweed on the rocks all piled up – twisted plants – below some earth – it looks like there are some roots – in my opinion it's from the same family as the fungus species on trees … the lichens.
I WONDER …	If it were a flower that blooms? – If it was dry grass? - If it was a mix of roots, dry twigs and earth? – Whether is is found in trees or on the ground? – What if it were some earth? – If it were a micro bush?
Adult relaunch: A child: Adult: Children: Adult: Children:	Is it a plant? Can you read all our description? … Yes then it must be a plant for all what we said. Is it alive or dead? Dead because it's grey – dark – dry – doesn't move – I am not too sure So if it's a plant and alive, what is it needed then? Water and sun
Documentation from children	Camera pictures and drawings Zoom "it looks like there are seeds on it"    
Set up for water and sun **. After a week**… Children …	It's alive! Because it absorbed water, it nurtured itself of water, roots looks differently and branches open up, colours changed.

Note: The purpose of this table is to document the thinking process of a small group of children who helped each other to follow a constructive process. The key observations were a genuine attitude of curiosity, building on each other's points, and surprise. Translated to convey meaning.

4.3. Differentiation

The intervention focused on assessment of students' readiness for a new geometric topic, i.e., area. The first step was a class brainstorm as reported in Figure 12.

Figure 12 - *Brainstorming as a first step to assess students' readiness.*

Brainstorming to collect children's ideas about area before introducing the concept.

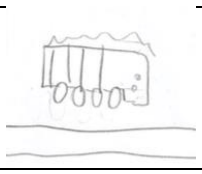
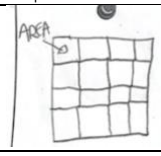
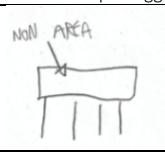


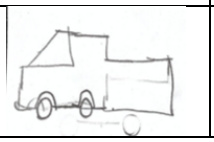
Note: This is a class activity where everyone can contribute and draw from classmates' ideas. Several starting points arose linked to geometry/math, physical place, confusion with air ("aria" in Italian), and a filling measure. Teacher collects group perception. Children's contributions are reported verbatim; language is untranslated to respect original versions.

Children completed the Frayer diagram after brainstorming; a selection of different levels is presented in Table 17.

Table 17 - *Frayer Diagram about area – Third Grade Primary*

A4 diagram was given to each child, who in turn individually completed it.

What is it?	What is it for?	Give an example	Give an example of "no area"	*Teachers' observation*
È una specie di sostanza gassosa che è in qualunque posto, per esempio: la borraccia, è chiusa ma dentro cé l'acqua ma l'area cé lo stesso!	A respirare a alimentare le piante e a vivere in generale.	L'area nel mondo.	In un foglio non cé l'area.	*Pupils show confusion between air and area.*
Una cosa che ci fa vivere	A vivere perché senza area moriamo			
Uno spazio interno	L'area serve a rinchiudere qualcosa	L'interno di un recinto 	La pizza "perché e da mangiare"	*Pupils already have a clear concept of area. Some can make assumptions about how to measure it. Some examples of non-area are*
L'interno di una forma		Ad esempio una stanza	Un cane che va a passeggio	
E una forma, e l'area sono i quadrati dentro la figura.	L'area serve a misurare la figura.			

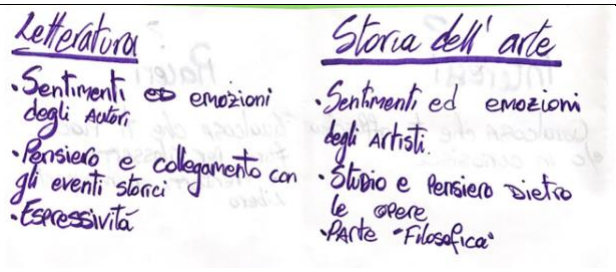
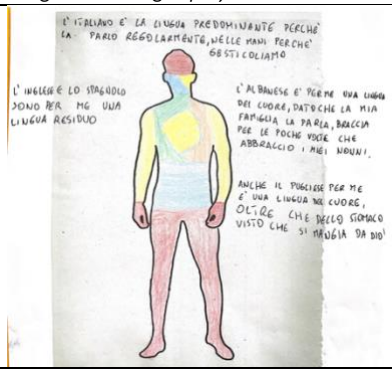
Secondo me è l'interno di una forma che si può misurare	Serve a misurare l'interno di una forma			*far away from a mathematical concept.*
	Serve per vedere quanta acqua c'è dentro a qualche altro liquido.	Pure è l'interno di qualcosa o di un oggetto.		*This pupil suggests the concept of volume.*

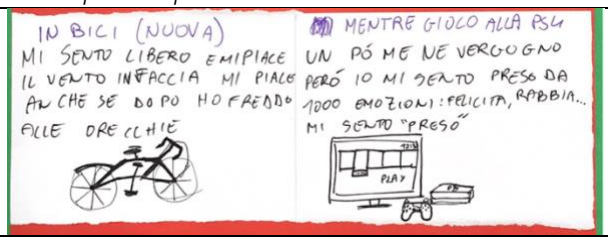
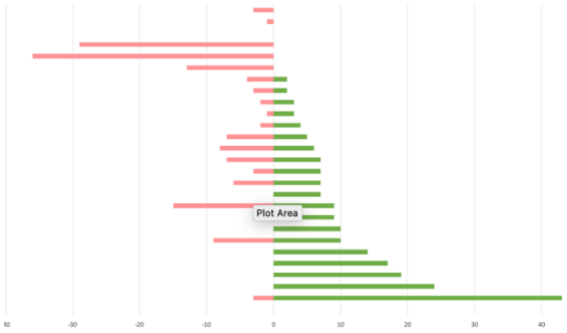
Note: Using the Frayer diagram the teacher can very clearly understand the starting point of each student and the class overall. It is a self-completed form. Verbatim of children is reported as spelled by them; it was decided to not translate them.

4.4. Student Profile

Some pictures of works produced by pupils are reported in this section (see Table 18). Then the protocol to use these tools within a shared personalized learning plan is presented.

Table 18 - *Some pedagogical tools completed by children identified as having a gifted profile.*

Favorite subjects and why	*Observations*
	Third year middle school student (13 years old). He highlights literature and history of art as favorite subjects: the feelings and emotions expressed, connections with historic events, thoughts behind the works. This student was considered best in mathematics, to which he said, "I am good at math, but it is not a subject that I like!"
Linguistic biography	
	First year middle school student (11 years old). He highlights Italian as a given but Albanian as a "heart" language that has a special connection with part of his family (and chooses "yellow as it is my mum's favorite color"), along with a dialect from Puglia as it is linked to the other side of the family. This was the first document that made it known that this student was not of 100% Italian heritage.
"You and your shadow"	
<u>Lights</u> Sympathetic Selfless Generous Self-deprecating Humor Precise Cunning  <u>shadows</u> I Ignore some people too perfectionist not sporty Lazy Indolent superficial	Third year middle school student (13 years old). Tools that allow self-awareness and important connection with a trusted adult. Drawings really express two very different parts.

"Six important places"	
	Third year middle school student (13 years old). Places or actions have importance due to associated feelings and emotions: freedom, happiness, anger, being invested. He gave the impression to adults that nothing was important.
"Critic in your head"	
	First year middle school student (11 years old). Through the sentences often heard and possible answers, the importance of relationships and the contrast between being independent and still needing comfort cuddles are evident.
Personal spontaneous note talking about giftedness	
"Next life something a bit easier, please!" (11-year-old)	Self-awareness during a small group lecture about giftedness.
Sociogram of Moreno	
4 preferences—positive and negative—about: Who would you like to sit next to? With whom would you like to work on a project? Who would you like to see after school? Is there an adult as a point of reference in the school for you? Each row corresponds to a student. Pink indicates negative score; green indicates positive score.  One chart for each area investigated.	It was made possible to understand social dynamics within the class, peers' perceptions about competences, and social relationships. This tool allows both an understanding of class perception towards a gifted student and more information about overall class relationships.

Note: Above examples are a jigsaw of different students' work.

Through collecting this information, teachers developed a much wider picture of the students. It was proposed to keep this information in the personalized learning plan, which was regarded as a process more than a fixed document. Starting from the PLP structure in use in the school, it was proposed to build a co-constructed document that was centered on the student profile and resources, where teachers could add their observations in class and, together with the pupil, find the most appropriate learning

adjustments. Parents would of course be involved soon after the pupil saw and approved their own profile; a protocol for this is presented in the findings below.

Moreno's diagram (see Table 18, final row) highlights social relationships within the class and, through a learning styles questionnaire, preferred sensory channel, way of processing information, and working style. It provides information at both individual and class levels, as shown in Table 19.

Table 19 - *Learning styles - class preferences*

Learning styles based on Mariani test: aggregation of class preferences based on individual results.

	AREA A - preferred sensory channels				AREA B - processing information		AREA C - preferred working style	
	VERBAL VISUAL	VISUAL NON VERBAL	AUDITORY	KINESTHETIC	ANALYTICAL	GLOBAL	INDIVIDUAL	GROUP
CLASS A	24%	21%	31%	24%	71%	29%	13%	87%
CLASS B	19%	29%	19%	32%	68%	32%	26%	74%

Note: After individual results, which are useful for each student, the teacher aggregated preferences to get the class's preferred styles. On this basis some activities were adapted.

5. Findings and implications

The main findings concerning the first area of investigation ("Can a practice in class support teachers to observe and act based on a recently learned topic?") are as follows.

Preschool teachers reported that the role of an observer in class gave them the opportunity to pay attention to discrete and subtle communications between children that they had not noticed before. They very much appreciated full interactions within the group of pupils, and they had the opportunity to see some children who were very often shy and set apart really bloom. The possibility to discuss the workshop with colleagues and a deeper dialogue with the expert allowed a better assessment of the child (for example, "A child with great communication and relational difficulties, he participated actively and with great enthusiasm, responding consistently and without fear to the requests proposed, showing a security in his ability to express his ideas that he rarely manifests. Change of attitude."[19]).

Primary school teachers reported that discussion amongst colleagues, or even better with an expert, resulted in their professional development in terms of both new methodologies implemented and reflection. Collaboration is perceived as very useful or even essential when presented with a new topic, as in the case of giftedness, to

[19] All verbatim and books quotation from Italian to English have been freely translated by the author.

compensate for the fear of making mistakes. When the teacher is next to their own pupils observing relationship dynamics and interventions, they can more effectively consider a new vision of their pupils.

Maddalena, a teacher of Second Grade Primary, said in an interview: "The activities were useful to evaluate and observe the students from another point of view, partly because they were done in pairs and then, conducted by another person which then allowed the main teacher to really observe".

"Being able to externally observe an activity conducted in this way, where many things about the children emerge, allows you to have a different view. And therefore, to understand even more things about your students. I must say that, as far as giftedness is concerned, there are children who may not come across as very competent in the classroom but who have come out of their shells so much in these activities."

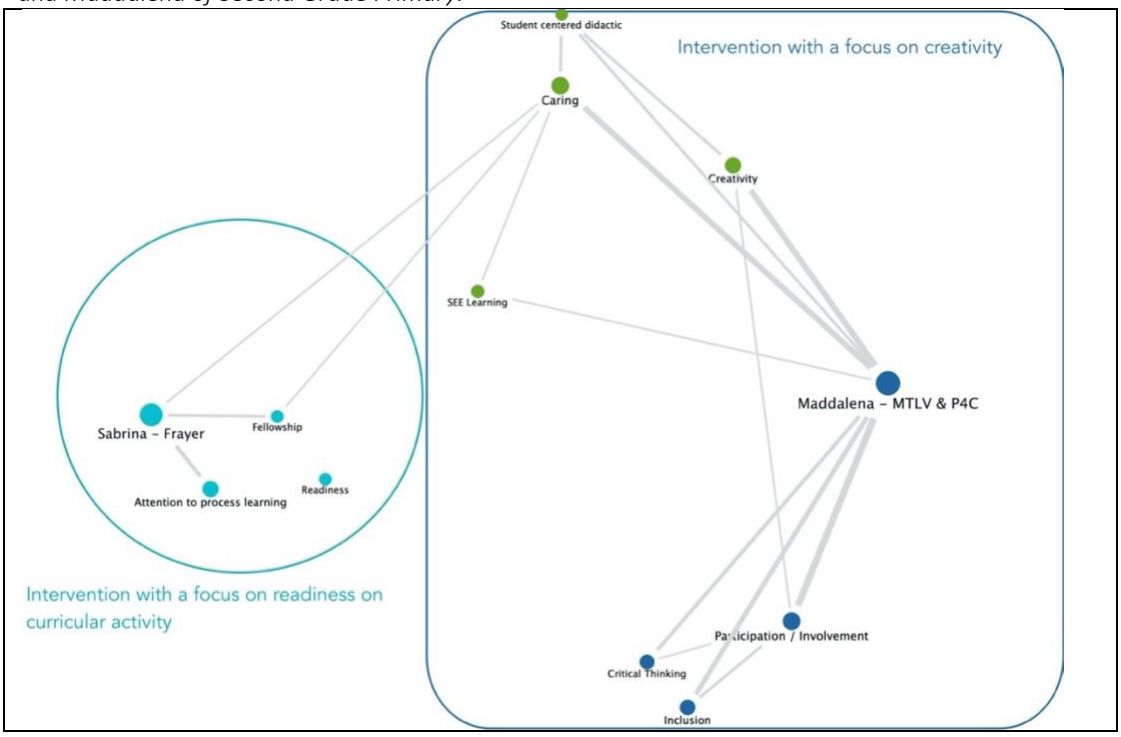
Middle school teachers had experience of several colleagues involved in the research and had access to my backstage support. In this case, sharing with colleagues of both the same class and of the same subject in a different class was key to building confidence and trying out new methodology.

In relation to the second area of investigation ("How have pupils' observation and understanding been improved by a child-centered pedagogy?"), the findings that surfaced are as follows.

From an in-depth, semi-structured interview with two primary school teachers, it emerged that implementing a child-centered pedagogy allowed a more well-rounded profile of the child. This is specifically the case when the tool used was more connected to readiness for the syllabus and when the learning process was highlighted, and also when the focus of the activity was stimulating critical thinking through creativity. The teacher's observation and perception were then broader, including pupils' creativity, critical thinking, involvement, caring, social and emotional skills, and inclusive pedagogy (see Figure 13 – Software used for coding Maxqda 2022).

Figure 13 - *Connections that emerged during in-depth interview - primary school*

Interview analysis coded based on area investigated. Sabrina is a teacher of Third Grade Primary and Maddalena of Second Grade Primary.



Note: Sabrina tried out the Frayer diagram as a tool to understand pupils' readiness before introducing area in geometry, while in Maddalena's class P4C and MTLV were used.

Sabrina, a participating teacher who worked on topics related to the syllabus, was able to appreciate the learning path of each student and was very conscious of the starting point of each one of them. Therefore, the reflective strategy for how to present the topic was based on pupils' starting point. She also noticed that children with a more naïve or eccentric idea of area (who confused it with "air" or linked it to the playground) were more flexible in adapting to the proposed geometric concept and were pleasantly surprised.

Maddalena, a participating teacher who had been involved in a more creative learning proposal and for a longer period, noticed an active participation of every child in the class, including those with disabilities and learning difficulties and children with a gifted profile. She clearly stated that both P4C and MTLV were very inclusive activities. The philosophy was perceived without any barriers to start with: children did not feel they were being individually assessed in any way due to the nature of a group activity that took place in a setting separate from the classroom and involved oral participation. MTLV was done in class, where children received the written text of the story and were

requested to write or draw their personal contribution; this was more challenging for all children with learning support. The creative activity allowed the teacher to notice that children came out differently from the class routine: Specifically for some children, their deep thoughts and complex connections suggested possible giftedness.

The middle school teachers who were interviewed applied already cooperative learning strategies within the classroom. Therefore, the focus of the project has been on awareness of students' reactions and inclusion. The interview process has been coded and the word cloud that came out of the child-centered pedagogy is illustrated in Figure 14.

Figure 14 - *Word Cloud: Child-centered pedagogy.*

Word cloud of interview about experience of child-centered teaching methodology.



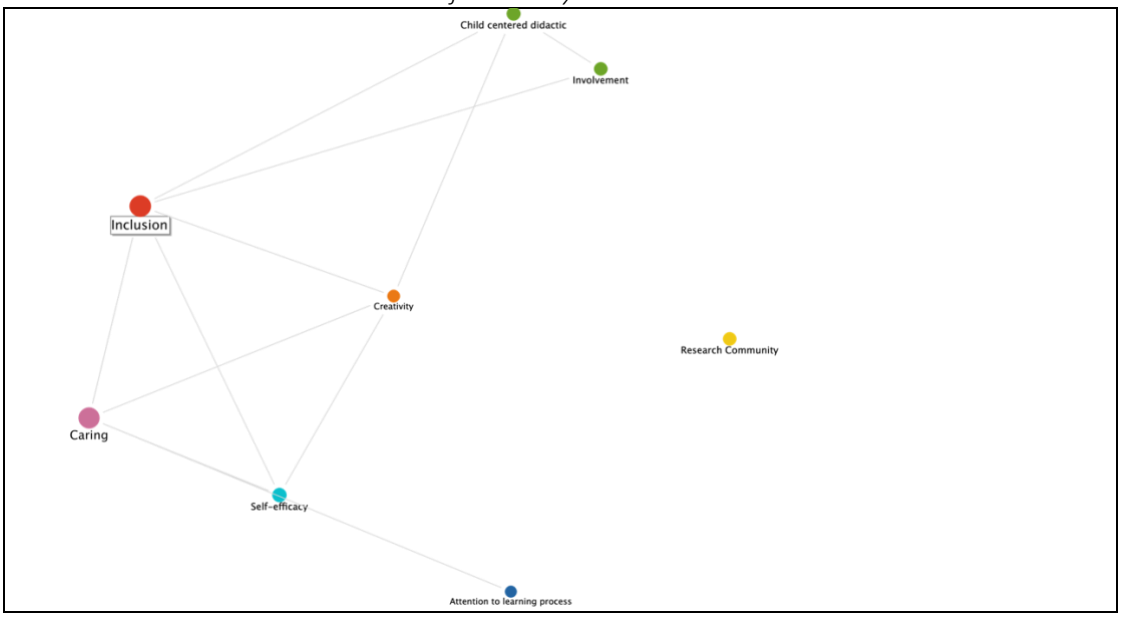
Note: Word cloud above is representative of a classroom closer to a busy atelier, where words like activity, work, cooperate, abilities, and classmates are especially pronounced. Teachers reported a truly inclusive atmosphere.

Teachers highlighted the fact that the measure of success of a project comes from peers applauding or congratulating their classmate for the work done. The importance of *segmenting* a learning unit responds to the need to cater for various learning approaches, interests, and challenges: it assures strong collaboration and classroom relationships even amongst very different student profiles; it welcomes students' suggestions, even when it leads down a path not foreseen by the teacher; it allows creativity to be expressed; and it facilitates support for pupils who need reassurance. Teachers presented the class as a workshop where children's personalities would have

to emerge, and where children would find classmates and adults ready to welcome and support the learning. The interview process clearly showed the intention of pursuing wellbeing and inclusion. Connections were analysed for the concepts of attention to the process, participation, research community, creativity, caring, inclusion, and self-esteem. Results are shown in Figure 15. *Inclusion* is the key outcome, shown with the highest connections, followed by *caring*. Inclusion, connected to the word cloud shown in figure 14, can be interpreted as active participation of students and recognition of the class as a group of learners.

Figure 15 - *Responses to a child-centered didactic*

Connections between coded interviews of secondary teachers.



Note: Inclusion is an intersection that allows the expression of caring, creativity, and self-efficacy while learning.

Concerning the third and final area of investigation ("Can tools developed for specific children's profiles be helpful in inclusive teaching?"), the findings are as follows.

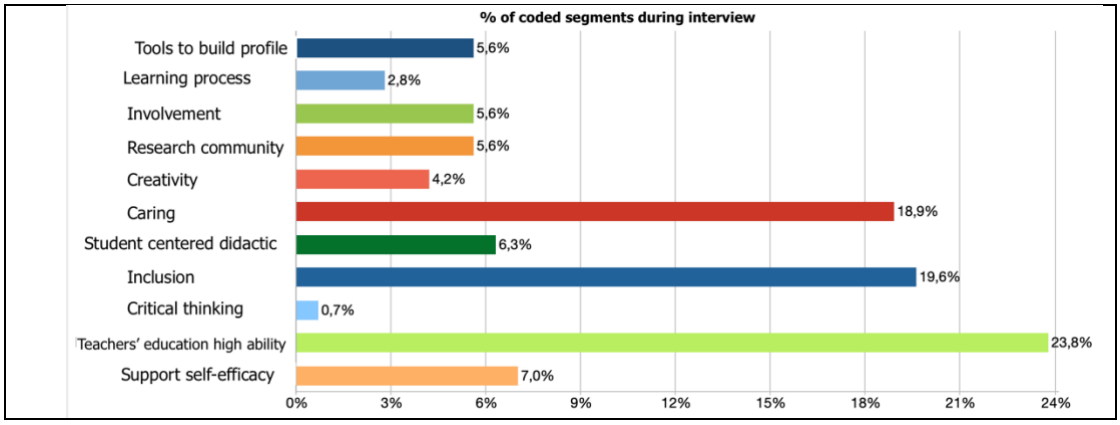
The outcome of specific profiles developed for students identified as gifted has been a protocol of delivering a Personalized Learning Plan for students with a gifted profile. This Personalized Learning Plan takes the form of a formal documentation that the school must complete to adjust the teaching. It was proposed and approved as a process more than a static image, to be co-constructed by teachers and the student based on the self-awareness tools used for the profile. The main areas included are shown in Table 20.

Table 20 – *Student Personalized Learning Plan*

Personalized Learning Plan – document parts	Source
Personal information	
Professional documentation and certifications	Handed in by family
Family information	
Relationship with peers	Moreno's diagram
Extra-school interests	Student's interests & Six Important Places
Spoken languages	Linguistic biography
Reasons to write a Personalized Learning Plan	
Highlight from cognitive profile	Wisc-IV
Teachers' observations	
Behavioral	
Learning styles	Mariano's learning styles
Didactic methodologies	
Specific learning goals and assessment	
Student's feedback	
Family agreements	
Signatures: teachers, students, parents and headteacher	
Attachments: tools used for student's profile	

Coded segments from interviews with middle school teachers identified that working with the specific tools to create a wider profile—initially for children with a gifted profile and then for the whole class—is a great opportunity for teachers' education (see Fig 16). It also provides a deeper knowledge about students. Soon after the improved perception of learning from the teacher's side, clear evidence emerged of a more widespread sense of classroom inclusion and caring.

Figure 16 - *Percentage of coded segments during secondary teachers' interviews.*



Note: Teachers often mentioned the professional development gained during the research and the clear wider inclusion perceived as caring for students and involvement while learning.

6. Discussion

The first area explored was the impact of scaffolding teachers' practice in the class while a new topic is being learned. Teachers perceived it as a great support that allowed a true observation of their class, dialogue with colleagues and the expert, and professional growth. The improved professional aspect was attributed to collaboration, the ability to observe a new methodology in action and its reflections on their pupils, and, as echoed in the planning of a new phase of a unit, maintaining the feeling of a professional need (Asquini, 2018).

The second area explored was the impact of observing pupils. All teachers reported witnessing their pupils shine in a new context and having a different relationship amongst peers. A well-rounded profile of each child was reflected from infant school all the way to middle school as new personality aspects were identified, principally when the core of the intervention was stimulating creativity and critical thinking. Pupils' relationships with peers were also often highlighted as being more inclusive and effective ("the thermometer of a good activity is given to me by classmates: applause or compliments"; "They work well together even with all their different learning difficulties or special need profiles; they are [class]mates anyway"; "They all participated; even children with disabilities were kept in the loop by classmates"). The heterogeneity of the class was not reduced, but teachers noticed increased harmony that gave rise to positive results. This echoes the words of d'Alonzo:

> In order to give the best of ourselves we need to feel welcomed, respected for what we are, valued in our qualities, as no one can give the best of himself if he does not feel part of a shared community adventure (2019c, p. 252).

Teachers took feedback from the learning styles test into consideration in the form of group preferences and individually, expressed by students to plan units. What arose is that, when the activity was strictly related to school curriculum, the information gained was more about the learning process than the child. The child's relationships and knowledge were enriched by activities not immediately related to the school topic, and possibly in different settings. In that case, some children presented themselves in

a completely different way, allowing teachers to get hints about a possible gifted profile that was never previously visible in class.

The third area investigated was extending the use of tools intended for a specifically gifted profile to all students in the class. Such tools were thought to result in a co-constructed individualized plan where pupils could recognize themselves and identify attainment goals together with teachers. This was reached in accordance with guidelines of the Ministry of Education in Italy (MIUR, 2011). Allowing the class to complete profiling tools had the effect of wider knowledge and a more inclusive attitude. These tools have been the base for some teachers' committees to talk about some students ("She says that she feels invisible and none of us would have ever thought about it," quote from a teacher about an 11-year-old pupil). Inclusive education, according to the United Nations (2016), is to be understood as a fundamental human right, "a principle that values the wellbeing of all students, respects their inherent dignity and autonomy, and acknowledges individuals' requirements and their ability to effectively be included in and contribute to society" (Committee on the Rights of Persons with Disabilities, 2016, p. 3). Due to the importance given to the extra-curricular information collected through the profile tools, teachers decided to use them as a class activity at the beginning of the first year of middle school.

In 1925 Lombardo Radice, during the International Conference for Children's Rights in Geneva, stated that he was convinced that special schools would not be beneficial for gifted students because in a classroom they act as yeast in a sourdough, but he also clearly mentioned the duty of the teacher to do their best to raise the average level of the class, to give a special place for creativity, and to differentiate for each student based on their interests and personal attitude. It is also clearly stated that gifted students should not be left by the wayside: He comments that the school is made for children, and not children for school (1925). The research group that worked on this empirical intervention strove to keep this in mind throughout, as a truly inclusive school is a place of wellbeing for everyone.

7. Conclusion

The aim of this explorative and qualitative experience was to understand what methodology could scaffold teachers' education to reflect a wider inclusive approach, embracing children with a gifted profile. The wider inclusive approach was noticed by several teachers, some actively involved in the research and others because giftedness became a topic in the school. Several students were identified, generating specific conversations with students, parents, experts, and colleagues. Special needs education in the school broadened its scope, ready to take on board the educational rights of children with a gifted profile. A very positive effect resulted from the fact that a group of teachers was involved in the research, allowing for informal and formal discussions and the exchange of experiences in the classroom, whether with a specific student or across classes or age groups. "Teachers modify their practice not by sweeping change but step by step, in small ways, as they reflect on their practice and will themselves grow" (Tomlinson, 2005, p. 269).

This research highlighted special education and gifted education as two traditionally distinct educational pathways that have become increasingly convergent in the last hundred years. Visionary Italian educators, including Lombardo Radice (1925), Loris Malaguzzi (Malaguzzi & Cagliari, 1945/1993_2016), Mario Lodi (1977), and Danilo Dolci (1973), had already seen the beginnings of this change many years ago, with a negative position towards differentiated classrooms[20]. They were and strove for an education in line with a full development of the child, deriving from the child's own interests and circumstance; the school was, in their vision, supposed to stand alongside the child to support the discovery and nurture of their own talents.

> Valuing the child's attitudes, starting from them, meant changing everything in the classroom: our relationship with them, the timetable, the distribution of activities in space and time, the same programs. To free them it was necessary to put them in a position to speak, and to do so it was necessary to remove any fear, because if the child is afraid of something, if they do not feel completely free, the key is kept jealously guarded and we can neither steal it from them nor snatch

[20] At the time mainly for children with disability – Lombardo Radice speech was intended to value eventuality of classes for gifted children.

> it from them: only they can give it to us when they trust us, when they understand that we are there to help them live in freedom (Lodi, 1977, p. 47).

Loris Malaguzzi stated in 1988 that "despite our merits, as adults we talk about children a lot, talk to them little, and listen to them even less" (Malaguzzi, 2016, p. 338). Listening to students to understand and discover has been a key element of positive feedback in this research.

Article 29 of the 1989 Convention on the Rights of the Child states that "the education of the child shall be directed to […] the development of the child's personality, talents, and mental and physical abilities to their fullest potential", intended for every child in the world. Once again, literature and guidelines, even if not specifically written to address children with a gifted profile, are aligned with the need to find a personal and unique relationship in the learning environment.

This study benefited from the involvement of a school in research, but resources behind the project were limited. The next step would be to prepare some in-depth interventions to keep working on teachers' education while maintaining a focus on the impact on the class and looking at the wellbeing and personal growth of every person in the class, including both the pupils and the educator.

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CONCLUSION

Key Findings and Further Research

This pilot study confirmed many aspects previously noted in literature. The following findings emerged:

(a) There is a category of special needs (gifted and talented ones) which the inclusivity built into the Italian school system currently fails to address, leaving students with these special needs overlooked by teachers (Chapter 1).

(b) Through action research, teachers moved away from the idea of "genius" and towards an authentic relationship with the child; through this, different facets emerged including creativity as well as some weaknesses.

(c) The alleged idea of a "norm" in the classroom was scrapped, removing the assumption that a "one size fits all" lesson can respond to everyone's needs.

(d) The teachers were able to lead the identification of gifted students, taking the school from one to 27 students formally recognized as having a gifted profile (including three with double exceptionality).

(e) The teachers felt supported in the research while learning and experimenting.

(f) The class was perceived as more industrious, and more attention was paid to the learning process, relationships, creativity, and critical thinking.

These aspects include the positive effect of a comprehensive teacher education that removed biases and the idea of dysfunctional asynchronous development—often influenced by media—leaving room for an authentic relationship between student and teacher (Matheis et al., 2017). Teachers also observed that learning does not follow a rigid trajectory and therefore gained greater openness and flexibility towards differentiation in the classroom (d'Alonzo & Monauni, 2021; Tomlinson, 2001, 2002; Tomlinson & McTighe, 2006). Italian teachers are already used to differentiating within classrooms to welcome students with different needs due to factors such as disability, learning difficulties, and language level (2021); however, this reality exists alongside the assumption of an average child, with an average way and pace of learning, that adds to the required bureaucracy. Differentiation in class means knowing each student on a deep, individual level and planning accordingly, changing the traditional habits of a class

teacher, and fully trusting in students and their desire to learn. This is no easy task: Differentiating in the classroom requires students to have a high degree of shared non-cognitive foundation (that is, knowledge and motivation), understand the reason behind a task (metacognition), and have a shared end goal or product (relating to progress along a learning curve, linked to student readiness). With a class of about 25 students, this opportunity proves a challenge. At the same time, many examples in Italy and abroad have proven that it is possible to achieve great outcomes by leveraging on a group that is actively involved (Don Milani, Mario Lodi, Danilo Dolci, Ann Tomlinson, and D.W. Johnson & Johnson).

After seminars and the knowledge-building phase, screening tools such as checklists proved valid and made it possible to support the trained teachers to arrive at the correct identification of their students.

The aspect of the project concerning the exploration of possible pedagogical trajectories offered encouraging support to teachers who were learning to observe and apply new methodologies. Three main elements emerged:

(a) Actions linked to the curriculum enabled increased visibility of the learning path as a process.

(b) The experiments that extended beyond strictly disciplinary content and were carried out in contexts other than the classroom revealed the child from a whole new perspective for the teacher, including aspects such as creativity, critical thinking, and behavior and attitude towards others.

(c) A further positive response was found towards the personalized learning plan, which was seen not as a compensatory tool but as a hub of resources and openings for reflection on the self, a metacognitive tool for awareness. To build the personalized learning plan, which was co-constructed with the student, some tools were used to help with self-reflection and metacognition. The group of teachers, finding these useful, tested them on the whole class with great success. Their use has now been widened to boost the relationship between teachers and students and they have become official tools used to welcome the younger middle school classes.

In the specific context of the test school, the following tangible repercussions arose:

(a) The school's teaching council has approved a transversal training on giftedness for all teachers for the school year 2023–24;
(b) From 2022–23, the special educational needs coordinator must have expertise in giftedness and twice exceptional children;
(c) A path leading towards a personalized learning plan shared with middle school students and related protocol has been approved, opening the doors for formative assessment;
(d) Pupil observation programs during primary school have been set up based on what was trialed;
(e) Families positively appreciated both teachers and the school for their involvement in the research project. The attention paid to students beyond academic achievement increased trust and respect.

Due to my involvement in the preparation of internal documents for the school as an expert in the field and as a teacher at the school in question, I recorded these repercussions myself.

The training carried out through action research had very positive implications concerning both skills gained and repercussions in the work context. The strength of the transversal and vertical working group in terms of school protocols and organizational structure managed to overcome the barriers posed by misconceptions and fear of the unknown.

The study showcased various strengths:

(a) The verticality of the project, which allowed different paths of experimentation as well as adaptation to the age of the students and personalization by teachers.
(b) The comparison of the literatures of special education, inclusive methodologies, and gifted education with a national and international perspective.
(c) The desire to learn expressed by the teachers in the research group.
(d) The figure of the in-school researcher, who was never too far from everyday problems and could independently navigate through school bureaucracy and in-school dialogue (including with management, administrators, colleagues, families, and students).

The empirical approach allowed an exploration of a very broad topic despite time and resource limitations. Further research could follow on from this first step.

This participatory research offers a different perspective on gifted education as it has been carried out in a context historically oriented to the integration of disability and could open the door to new approaches to wellbeing in a highly differentiated classroom, without sacrificing the right to learn of every child. Screening tools used have proven their efficacy not only in identifying gifted profiles but also in enriching teachers' insights into their class. Identifying gifted profiles has proven an opportunity to recognize that teachers have the capacity for a deeper understanding of their students and may eventually be able to identify a neurodiverse or twice exceptional profile. This paves the way for a strengthened dialogue with professional psychologists who have been a strong voice in recent years for all learning difficulties and learning disabilities present in schools.

The study allows a reflection on implications for educators and practitioners not only in terms of possible identification but also in the development of a personalized learning plan (PDP in Italian) as the document is composed together with the student, leveraging on individual strengths and interests.

The importance of a competent teacher has been a common thread throughout this work and the emulated teacher education supports thinking of ways to create awareness of gifted and talented profiles among Italian practitioners. An ideal context in which to further knowledge of neurodiverse profiles among newly qualifying special support teachers and secondary teachers would be the required year of university training (Tirocinio Formazione Attiva, TFA). For pre/primary school teachers, neurodiversity could be included in psychology and pedagogy exams during the five-year Primary Education Sciences (*Scienze della Formazione Primaria*) course. It is more difficult to close the wide gap that exists among in-service teachers where further training is not mandatory; in this case, it would be important to offer voluntary educational courses, promote research at a local level, and introduce tools to stimulate professional development. This approach was already introduced with regards to learning difficulties in 2010.

It would be important to continue the experimentation, increasing both the number of teachers and classes involved, to validate inclusive pedagogical applications. This

research project was carried out with wellbeing at school in mind; however, due to the coincidence of the COVID-19 pandemic, it was not possible to fully grasp any changes or variations. The element of creativity appears to be very important, and it would be advantageous to evaluate different tools to capture different manifestations and variations of it according to the age of the children. The limited resources of the project, including the involvement of just one researcher, did not allow for in-depth studies on families or the development of tutoring projects for struggling children or teachers. Regarding the school itself, it was very clear that teachers need to feel supported through novelty and experimentation; there must be the possibility of regular dialogue.

For preschool, further work is believed necessary to understand what implications to draw from teachers' observations of the class: The lack of structured tools for this age group did not offer the necessary support to the teacher to be able to propose a nomination. A dedicated path like the Philosophy for Children, accompanied by systematic documentation, could be a way forward in the future.

A deeper understanding is needed of the impact in the classroom and across the school that a screening process could have, both on relationships in class (Reffieuna, 2003; Zappella, 2021) and on a personal level—that is, on self-esteem and increased self-awareness (Mormando, 2011; Zanetti, 2017).

Ultimately, it would be important to verify the validity and effectiveness of tools used on a larger sample of classes and teachers. In regard to the tools employed by educated teachers which proved effective in this context, it would be important to understand their validity when administered by teachers without knowledge of gifted and talented profiles to separate the impact of tools and professional development. The first field to be explored could be the application of tools individually by two teachers, of whom only one has been trained, in the same class. Results can be compared weighting the teacher education importance and effectiveness of tools, and ultimately deeper profiles may arise.

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Appendices

Appendix A Instruction shared to submit Moreno's Sociogram

Sociogramma di Moreno per PRIMARIA e SECONDARIA

INDICAZIONI SOMMINISTRAZIONE:

Bene accertarsi di somministrare in un giorno in cui tutti gli alunni siano presenti o per lo meno sottolineare chi siano gli assenti (scrivere i nomi alla lavagna) per evitare che vengano dimenticati (vero in particolar modo per le classi basse).

Non ci sono risposte giuste e sbagliate, nessuno sarà valutato in base alle risposte date. I **nomi da scrivere devono essere quelli della classe**. Se dovessero emergere domande del tipo "posso mettere mia madre? O mio fratello?" rispodere "Fai quello che credi, quello che ritieni meglio!" per evitare di influenzare. L'indicazione di soggetti estranei alla classe non presenta validità o, al limite, può essere l'indicatore dell'esistenza di uno scarso senso di appartenenza del bambino al gruppo classe.

Preparare una piantina della classe che possa fungere da guida anche per le risposte indicando:

- Posizione docente
- Porta finestre e mobilio
- - Disposizione dei banchi è rigida o subisce cambiamenti? Chi ha scelto la disposizione?
- In base a quale criterio è stata scelta la disposizione (sociale, cognitivo, facilità di gestione classe, regole covid)
- I bambini possono scegliere liberamente il loro posto?

Sociogramma di Moreno per PRIMARIA e SECONDARIA

INDICAZIONI SOMMINISTRAZIONE:

Dati relativi al rendimento scolastico con la percezione adulta.
Caratteri peculiari dei bambini
Etnia diversa da quella italiana e competenza linguistica.

E' importante che l'insegnante faccia delle riflessioni prima della somministrazione per mettere a fuoco la propria percezione della classe che sarà poi successivamente confrontata con i dati che emergeranno dal feedback degli studenti.

Vi allego le schede complete, ovviamente ragioniamo se fossero tutte utili, o magari da far compilare anche in maniera incrociata in modo da creare uno scambio tra docenti della stessa classe.
Per la secondaria: può avere senso fare domande specifiche per materie? Pensate alle competenze che potrebbero emergere: linguistica, digitale, matematica, arte? O vogliamo rimanere generici?

Ho aggiunto anche una domanda sugli adulti di riferimento a scuola. Secondo me importante da leggere nell'ambito delle relazioni a scuola. Ovviamente sarà l'ultima.

Appendix B Moreno's Sociogram Primary School

RIFERIMENTO DOMANDE Scuola Primaria pagina1/1

NOME: _____ DATA:_____
CHI VORRESTI COME COMPAGNO DI BANCO?
1._____
2. _____
3._____
4._____

NOME: _____ DATA:_____
CHI **NON** VORRESTI COME COMPAGNO DI BANCO?
1._____
2. _____
3._____
4._____

NOME: _____ DATA:_____
CON CHI VORRESTI FARE UN LAVORO?
1._____
2. _____
3._____
4._____

NOME: _____ DATA:_____
CON CHI **NON** VORRESTI FARE UN LAVORO?
1._____
2. _____
3._____
4._____

NOME: _____ DATA:_____
VICINO A CHI VORRESTI SEDERTI IN GITA IN BUS?
O GIOCARE IN CITTADELLA?
1._____
2. _____
3._____
4._____

NOME: _____ DATA:_____
VICINO A CHI **NON** VORRESTI SEDERTI IN GITA IN BUS?
O GIOCARE IN CITTADELLA?
1._____
2. _____
3._____
4._____

Appendix C Middle School – Sociogram Students' Google Form

Qualche info su di te!

1. Spunta la tua scuola

   Contrassegna solo un ovale.

   - ◯ Fra Salimbene
   - ◯ Ulisse Adorni
   - ◯ Jacopo Sanvitale
   - ◯ Altro: _____

2. Quale classe

   Contrassegna solo un ovale.

   - ◯ 1°
   - ◯ 2°
   - ◯ 3°
   - ◯ 4°
   - ◯ 5°

3. Quale sezione?

   Contrassegna solo un ovale.

   - ◯ A
   - ◯ B
   - ◯ C
   - ◯ D
   - ◯ E
   - ◯ F
   - ◯ G
   - ◯ DOCENTE

4. il tuo nome e cognome

   _____

5. Per te le relazioni tra compagni sono importanti?

6. C'è un adulto della scuola di riferimento per te? vuoi dirci il suo nome?

Ora ti facciamo alcune domande a cui rispondere pensando alla tua classe .

Rispondi in maniera sincera - le risposte sono riservate.

7. Chi vorresti come compagna o compagno di banco? 1° preferenza Nome e Cognome

8. Chi vorresti come compagna o compagno di banco? 2° preferenza Nome e Cognome

9. Chi vorresti come compagna o compagno di banco? 3° preferenza Nome e Cognome

10. Chi vorresti come compagna o compagno di banco? 4° preferenza Nome e Cognome

Chi NON vorresti come compagno/a di banco?

In questo caso la tua 1° scelta sarà la tua risposta meno gradita.

11. Chi NON vorresti come compagno/adi banco? 1° scelta meno gradita Nome e Cognome

12. Chi NON vorresti come compagno/a di banco? 2° scelta meno gradita

13. Chi NON vorresti come compagno/a di banco? 3° scelta meno gradita

14. Chi NON vorresti come compagno/a di banco? 4° scelta meno gradita

Con chi vorresti fare un lavoro?

Dai sempre la tua preferenza dal più gradito (1° posto al 4°)

15. Con chi vorresti fare un lavoro? 1° scelta Nome e Cognome

16. Con chi vorresti fare un lavoro? 2° scelta

17. Con chi vorresti fare un lavoro? 3° scelta

18. Con chi vorresti fare un lavoro? 4° scelta

Con chi NON vorresti fare un lavoro?

Attenzione qui ti chiediamo di esprimere il nome del compagno/compagna con cui non vorresti lavorare.

19. Con chi NON vorresti fare un lavoro? 1° scelta meno gradita Nome e Cognome.

20. Con chi NON vorresti fare un lavoro? 2° scelta meno gradita.

21. Con chi NON vorresti fare un lavoro? 3° scelta meno gradita.

22. Con chi NON vorresti fare un lavoro? 4° scelta meno gradita.

Chi ti fa piacere vedere dopo scuola?

23. Chi ti fa piacere vedere dopo scuola? 1° scelta di preferenza Nome e Cognome

24. Chi ti fa piacere vedere dopo scuola? 2° scelta di preferenza

25. Chi ti fa piacere vedere dopo scuola? 3° scelta di preferenza

26. Chi ti fa piacere vedere dopo scuola? 4° scelta di preferenza

Chi NON ti fa piacere vedere dopo scuola?

Attenzione anche qui la 1° scelta sarà la meno gradita.

27. Chi NON ti fa piacere vedere dopo scuola? 1° scelta NON gradita Nome e Cognome

28. Chi NON ti fa piacere vedere dopo scuola? 2° scelta NON gradita

29. Chi NON ti fa piacere vedere dopo scuola? 3° scelta NON gradita

30. Chi NON ti fa piacere vedere dopo scuola? 4° scelta NON gradita

Quale compagno/a sceglieresti per un lavoro di lingua straniera di gruppo?

Avrai imparato ti chiediamo 4 scelte dalla 1° alla 4° preferenza

31. Quale compagno/a sceglieresti per un lavoro di lingua straniera di gruppo? 1° preferenza Nome e Cognome

32. Quale compagno/a sceglieresti per un lavoro di lingua straniera di gruppo? 2° preferenza

33. Quale compagno/a sceglieresti per un lavoro di lingua straniera di gruppo? 3° preferenza

34. Quale compagno/a sceglieresti per un lavoro di lingua straniera di gruppo? 4° preferenza

Questi contenuti non sono creati né avallati da Google.

Google Moduli

Appendix D P4C – Example of conversation - Primary School

FILOSO-FARE

18 feb 2022 – 2° Primaria IC Parma centro
Dopo lettura “Conta su di me” di Miguel Tanco – Trieste – Ed Emme EL

Atelier FilosoFare del progetto APC
Resp Daniela Caserta PhD Reggio Childhood Studies
P4C Expert Sofia Antoniello Uni Padova
Docente di classe presente: Maddalena Colla

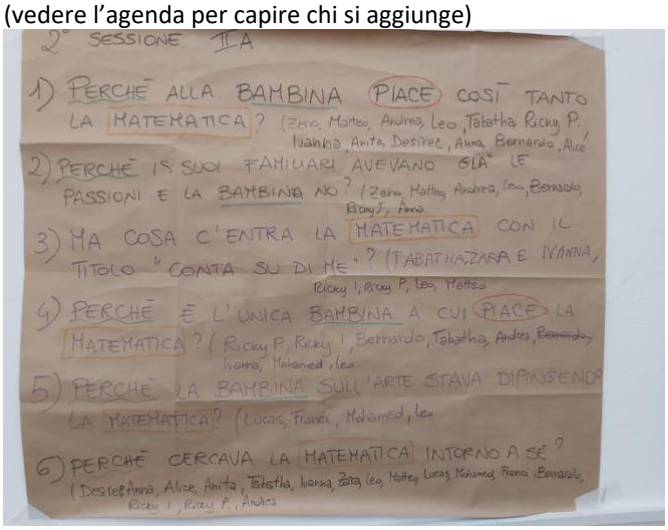
Trascrizione del dialogo successivo alla lettura dell’albo illustrato.

Sofia: Nei gruppi adesso provate a pensare alla storia letta, pensate ad una domanda o una cosa che vi è piaciuta, d’accordo?
Tabatha: io ho già una domanda!

I bambini parlano per scegliere la domanda.

Sofia: Zeno trovata la domanda? Cos’è che non piace della domanda?
Zeno: allora a lui non piace la mia ma a me non piace la sua…
Sofia: e allora non possiamo provare a metterle insieme queste domande? Quali sono le 2 domande?
Zeno: perché alla bambina piaceva così tanto la matematica?
Matteo: perché i suoi familiari avevano già le passioni e la bambina non ancora?
Tabatha: Ma che c’entra “conta su di me” se a lei piace la matematica?
Riccardo I: Perché è l’unica bambina a cui piace la matematica?
Lucas: perché la bambina sulla tela di arte dipingeva la matematica?
Desire: ma perché cercava la matematica intorno a sé?

Vediamo se c’è qualcuno che si vuole associare a queste belle domande?
B: Cosa vuol dire aggiungersi?
Sofia: vuol dire che ti piace questa domanda e ti aggiungi.
B: Ok
Sofia: hai fatto bene a chiedere, ti vuoi aggiungere?
B: No
(vedere l’agenda per capire chi si aggiunge)



Domande emerse … di partenza per agenda.
Sofia: ci sono delle parole che si ripetono?
Bni: matematica, perché …. Bambina … e piace

Perché alla bambina lei piace così tanto la matematica? (Matteo – Leo – Zeno - Andrea)
Perché i suoi familiari avevano le sue passioni e la bambina non ancora? (Matteo – Leo – Zeno - Andrea
Ma che c'entra la matematica con "conta su di me"? (Tabatha Zara e Ivanna)
Perché è l'unica bambina a cui piace la matematica? (Riccardo P e I e Bernardo)
Perché la bambina sulla tela dipingeva la matematica (Lucas, Francesco e Mohamed
Perché cercava la matematica intorno a sé? Desire Anna Alice e Anita

B: Cosa vuol dire aggiungersi?
Sofia: allora di cosa vogliamo parlare? Possiamo scegliere due cose diverse:
- Una domanda che piaceva quasi a tutti: Perché cercava la matematica intorno a sé. E potrebbe essere una strada oppure possiamo chiederci la relazione tra bambina, piace e la matematica. Di cosa volete parlare? O ancora del titolo cosa c'entra la matematica con il titolo conta su di me?
B: io lo so
Tabatha: Sarebbe bello discutere su tutto …
Sofia: eh hai ragione però dobbiamo scegliere una perché…
Tabatha: magari possiamo unire matematica con bambina e con piace: perché alla bambina piace la matematica
Sofia: uhh e cosa ne pensate voi? Volete che accogliamo quello che dice Tabatha o volete discutere di qualcosa altro?
Tabatha: se discutiamo di tutto possiamo ottenere la risposta su tutto …
Sofia: in realtà bisognerebbe provare, non so se riusciamo ad ottenere la risposta su tut
B: io ho capito qual è la risposta perché, cosa c'entra il titolo conta su di me …
Sofia: ho capito ma dobbiamo capire se tutti vogliono parlare di quest'ultima domanda..
B: no nessuno
Tabatha: secondo me dobbiamo parlare di quella che ne ha di più …
Sofia: cioè di questa ultima?
Tabatha: certo, quella c'è quasi tutta la classe..
Sofia: volete che proviamo a rispondere a questa?
Bni:_ no no noooo
Tabatha: si siiiiii
Sofia: quindi cosa abbiamo deciso?
B: l'ultima!
Sofia: perché cercava la matematica intorno a sé?
B: siii
Sofia: Chi vuole rispondere?
Oppure facciamo così io scrivo matematica e poi vediamo di cosa vogliamo parlare…
Tabatha: secondo me oggi abbiamo studiato matematica al posto di arte …
Sofia: ok chi ha voglia di dirci qlc Vuoi partire tu Ricky
Riccardo: Io voglio dare la risposta su cosa c'entra il "conta su di me", c'è questa bambina che conta su di lei i numeri, calcola nella testa… quindi conta su di me ha senso …
B: È come se lei dice "la matematica conta su di me …" quindi è brava e le piace la matematica.
Sofia: ma secondo voi che differenza c'è tra la matematica conta su di me ed io conto sulla matematica?
B: Niente!
Sofia: c'è differenza?
Desiree: È una domanda uguale ma nel senso diverso. Tipo calcola i numeri nella testa e la matematica conta su di me.
Sofia: cos'è questo senso diverso?
Desiree: tipo calcola nella testa ….
Sofia: uhhh siete d'accordo?
B: per me sono un po' uguali ...
Sofia: ma secondo voi conta su di me si può riferire solo ai calcoli oppure possiamo usarla anche in altro senso?

Prima la cosa interessante … quando abbiamo chiesto di cosa avrebbe potuto parlare il libro avete detto qualcuno che conta su di me, che si fida, che mi aiuta … allora che cosa c'entra questo?
Tabatha: forse con tutte le risposte che hanno fatto i miei compagni alla mia domanda forse mi è venuta a me la risposta, forse le persone possono contare su lei perché con la matematica risolve tutto.
Sofia: cosa ne pensate?
Francesco: non lo so…
Sofia: tu dici gli altri contano su di lei perché è brava in matematica, giusto?
Tabatha: Nooo
Sofia: no, perché risolve tutto…
E quindi cosa significa questo?
Tabatha: Significa aiutare con la propria passione. Aiutare facendo qlc che ti piace.
Sofia: avete sentito cosa ha detto Tabatha? Siete d'accordo?
B: no no …
Sofia: dice che è possibile aiutare gli altri con la propria passione.
Tabatha: aiutandoli a cercando di insegnarli a fare questa bellissima cosa… perché se per esempio una persona non ha ancora una passione ma ha voglia di imparare basta che gliela insegna…
Sofia: camilla hai la mano alzata…
Camilla: si mi sono scordata
Sofia: allora abbiamo iniziato a capire che relazione c'è tra matematica e contare su di me perché significa che la bambina calcola i numeri nella sua testa, poi qualcun altro ha detto però vuol anche dire che la bambina aiuta gli altri perché è brava con la matematica e risolve con la matematica … e quindi può aiutare gli altri con la propria passione. Proviamo a fare un esempio? Quando può succedere che una bambina può aiutare gli altri?
Tabatha: Tipo ci sono una pizza gigante per venti ospiti e quella pizza può fare almeno 40 fette, e quindi lei dato che sa che la matematica, vuol dire che 40 diviso 2 fa, ven … aspetta è vero? Sì 40 diviso 2 fa 20 lo sapeva di già e quindi dice "allora ci prendiamo 2 pezzi di pizza ognuno"
Sofia: ok quindi questo potrebbe essere un esempio di aiuti con la matematica … c'è qualcun altro che h ala passione per la matematica? Oltre Tabatha che ce lo ha detto?
B: io
Sofia: Leo, Ivanna … mmm ma allor avete proprio una passione ... vi capita di vedere il mondo come quella bambina attraverso la matematica?
Tabatha: io sono come quella bambina, uguale a quella bambina ...
Anna.: Io ho la mia passione è giocare a fare la stilista, cioè fare i vestiti e quando vado al parco a volte mi sembra di vedere tipo che i vestiti per gli alberi sono le foglie, e vedo ovunque un vestito!
Sofia: uhhh interessante! A voi è mai capitato? Ma capiamo tutti hanno una passione secondo voi?
Tabatha: io ho la passione della matematica fino dai 2 anni.
Sofia: ok a parte T. che abbiamo ha la passione per la matematica ed Anna per la moda, vuole diventare stilista chi è che … delle passioni?
Sofia: Leo calcio e le torte …
Matteo: io ho molte passioni..
Sofia: allora tutti hanno una passione secondo voi?
Tabatha: secondo me un po' tutti ma non tutti perché qualcuno non l'ha ancora scoperta o forse alcuni ce l'avevano ma non hanno capito che era la loro passione.
…
Sofia: non l'hanno scoperto o si sono un po' sbagliati … ok
Però poi adesso Leo ha detto che bisogna anche capire … che uno può avere più passioni… può essere? Possiamo avere più passioni? Secondo voi … Ricky che passione hai tu?
Riccardo: cucinare..
Sofia: e vedi il mondo come il cibo?
Riccardo: si tutto …
Sofia: per esempio quando ti capita?
Riccardo: quando vado allo zoo…
Sofia: quando vai allo zoo vedi gli animali come il cibo?
Riccardo: si ...
Sofia: … sentiamo qualcun altro Ivanna qual è la tua passione?
Ivanna: la scientifica
Quando vado al parco vedo il mondo come è fatto …

Sofia: Ricky?
Riccardo: la mia passione è andare sugli scogli e battere le rocce
Sofia: ok ma quella è una cosa che sei bravo a fare o è una passione? Che differenza c'è tra una cosa che ti piace ed una che ti appassiona?
Riccardo: la mia passione
Sofia: uhhh Zeno!
Zeno: la mia passione è andare al mare.
Sofia: ma secondo te che differenza c'è tra mi piace o è la mia passione?
Zeno: non lo so
Sofia: qualcuno lo sa? Leo
Leo: che se ti appassiona ti piace molto, invece ti piace vorresti andarci.
Sofia: quindi diciamo che la passione è qualcosa di più grande?
Leo: si
Sofia: ok Matteo
Matteo: in realtà la mia propria passione è calcio
Sofia: ok ma secondo voi perché quando una cosa ci appassiona vediamo tutto come quella cosa lì? Perché succede?
B: in realtà la mia passione è il tennis...
Sofia: si ma perché questa bambina quando camminava vedeva tutto come matematica? Perché ?
Francesco: perché ha lei piaceva la matematica ...
B: perché c'erano le forme geometriche…
Sofia: ma come si fa quando andate in giro a vedere la vostra passione? Come si fa ...?
T: possiamo immaginarla! Tipo se la nostra passione è la matematica possiamo immaginarci di portarci a spasso un numero al parco, che è un nostro amico, oppure vedere gli alberi a forma di 1 e tutte le foglie a forma di 3…
Sofia: uhhh siete d'accordo?
Bambini: si si no no
Sofia: ok allora facciamo un piccolo riassunto di quello che abbiamo detto. Siamo partiti dalla matematica però c'era una cosa che Ricky voleva proprio dirci che lui aveva capito la relazione tra contare su di me e matematica però quello che volevo chiedervi è siamo sicuri che contare su di me voglia dire solo avere numeri in testa, calcolare qualcosa…
Riccardo I: in realtà "conta su di me è un concetto un pochino difficile da spiegare"
Sofia: ci vuoi provare? Puoi spiegarcelo tu? Dai …
Riccardo I: Io immaginavo delle nuvolette e che conta se stessa…
Sofia: vuoi provare tu a spiegare questo concetto difficile?
Riccardo: Allora praticamente è come immaginarsi delle nuvolette con la testa che fa dei calcoli molto grandi … e quindi contare, calcolare ed altre cose
Tabatha: io di notte mi sogno sempre i numeri …
Sofia: perché parli delle nuvolette? Perché ti sono venute in mente le nuvolette?
Riccardo: perché nel libro ho visto che aveva una specie di nuvoletta sulla testa quando guardava i quadrati e calcolava
Sofia: uhmm quindi potrebbe essere un po' usare l'immaginazione per il calcolo?
Tabatha: si è possibile!
Sofia: cosa dite proviamo a fare una freccia? Potrebbe essere che l'immaginazione la colleghiamo con le nuvolette e le nuvolette sono collegate con al matematica… potrebbe essere?
Tabatha: si ma secondo me sono troppe frecce!
Sofia: sono troppe frecce!

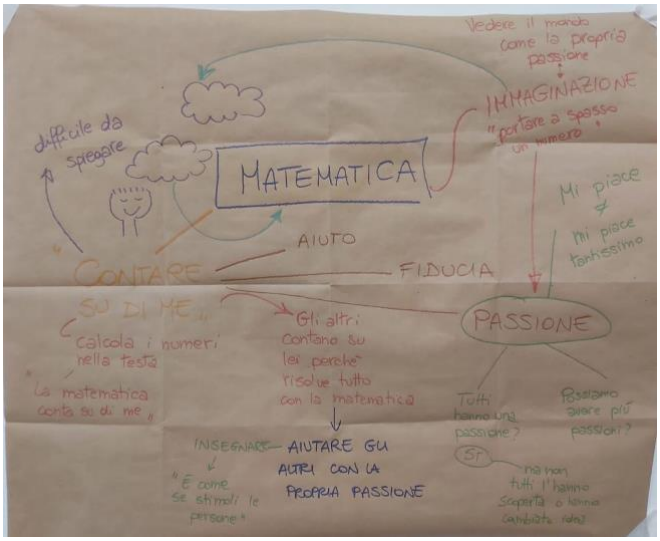
Tabatha: Gesti per imitare le frecce che si uniscono!

Sofia: Piccolo riassunto di quello che abbiamo detto, siamo partiti dalla matematica ed abbiamo detto cosa c'entra con Contare su di me? All'inizio pensavamo che contare su di me significava, aiutarsi, avere fiducia ma poi Richi ci ha detto "secondo me c'entra con i calcoli" cioè avere in testa dei numeri, io conto su di me perché sono bravo ad usare i numeri e quindi la matematica conta su di me e poi Tabatha ha aggiunto: beh però se io sono brava con i numeri posso anche aiutare gli altri con questa mia passione, posso anche insegnarla e stimolo qualcun altro a diventare bravo. Allora ci siamo chiesti, va bene allora contare su di me potrebbe anche essere legato ad aiutare gli altri, io conto su di te perché sei bravo.

Quindi è importante la passione, abbiamo detto contare su di me è in qualche modo legato alle passioni, tutti possono avere una passione ma magari C'è ancora chi non l'ha scoperta e possiamo anche avere più di una passione. E poi abbiamo anche detto che c'è una differenza tra la passione e mi piace qualcosa, la passione è qualcosa più grande. Alla fine abbiamo detto beh il fatto di avere una passione fa sì che io possa vedere questa passione un po'nel mondo grazie all'immaginazione e qua con l'immaginazione siamo tornate alle nuvolette del contare su di me che è un concetto che ha detto Riccardo è molto difficile da spiegare.

Tabatha: adesso facciamo matematica al posto di arte?
A me è piaciuta perché abbiamo fatto delle domande ed abbiamo matematicato!

Laboratorio su Avatar matematico e passione …
Bambino: L'avatar deve essere un simbolo!



Appendix E MTLV -Thinking Routine "Color, Symbol, Image"

A THINKING ROUTINE FROM PROJECT ZERO, HARVARD GRADUATE SCHOOL OF EDUCATION

Color, Symbol, Image

A routine for distilling the essence of ideas non-verbally.

As you are reading, listening, or watching, make note of things that you find interesting, important, or insightful. When you finish:

- Choose a ***color*** that you feel best represents or captures the essence of a key idea.
- Choose a ***symbol*** that you feel best represents or captures the essence of a key idea.
- Choose an ***image*** that you feel best represents or captures the essence of a key idea.

With a partner or group, first share your color and then share the item from your reading that it represents. Tell why you chose that colour as a representation of that idea. Repeat the sharing process until every member of the group has shared his or her Color, Symbol, and Image.

Purpose: What kind of thinking does this routine encourage?
This routine asks students to identify and distill the essence of ideas from reading, watching, or listening in non-verbal ways by using a color, symbol, or image to represent the ideas.

Application: When and where can I use it?
This routine can be used to enhance comprehension of reading, watching, or listening. It can also be used as a reflection on previous events or learnings. It is helpful if students have had some previous experience with highlighting texts for important ideas, connections, or events. The synthesis happens as students select a color, symbol, and image to represent three important ideas. This routine also facilitates the discussion of a text or event as students share their colors, symbols, and images.

Launch: What are some tips for starting and using this routine?
After the class has read a text, you might ask the class to identify some of the interesting, important, or insightful ideas from the text and list these on the board. Write CSI: Color, Symbol, Image on the board. Select one of the ideas the class has identified. Ask students, what color might they use to represent the essence of that idea. What color captures something about that idea, maybe it is the mood or tone. Select another idea and ask the class what symbol they could use to represent that idea. *You might define a symbol as a simple line representation or uncomplicated drawing, such as two crossed lines to denote an intersection of ideas, or a circle to represent wholeness or completeness.* Then pick another idea from the list and ask students what image they might use to represent that idea. *You might define an image as a visual image or metaphor that is more complex and fully developed than just a symbol.*

Share your experience with this thinking routine on social media using the hashtags **#PZThinkingRoutines** and **#ColorSymbolImage**.

PZ PROJECT ZERO HARVARD GRADUATE SCHOOL OF EDUCATION

cultures of thinking

This thinking routine was developed as part of the Cultures of Thinking project at Project Zero, Harvard Graduate School of Education.

Explore more Thinking Routines at pz.harvard.edu/thinking-routines

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https://pz.harvard.edu/sites/default/files/Color%20Symbol%20Image_1.pdf

Appendix F MTLV -Thinking Routine "See, Think, Wonder"

A THINKING ROUTINE FROM PROJECT ZERO, HARVARD GRADUATE SCHOOL OF EDUCATION

See, Think, Wonder

What do you see?

What do you think about that?

What does it make you wonder?

Purpose: What kind of thinking does this routine encourage?
This routine encourages students to make careful observations and thoughtful interpretations. It helps stimulate curiosity and sets the stage for inquiry.

Application: When and where can I use it?
Use this routine when you want students to think carefully about why something looks the way it does or is the way it is. Use the routine with a relevant object (such as an artwork, image, artifact, chart, video, etc.) at the beginning of a new unit to motivate student interest, or try it with an object that connects to a topic during the unit of study. Consider using the routine with an interesting object near the end of a unit to encourage students to further apply their knowledge and ideas.

Launch: What are some tips for starting and using this routine?
Once you present the object to your students, give them time to observe it. It may be useful to explain that they are first going to describe exactly what they see, not what they think they see. In the second step when students describe what they think about what they're seeing, you could ask them follow-up questions like, "What else is going on here?" or "What do you see that makes you say that?" These questions help move students away from giving unsupported opinions encouraging them instead to use evidence to explain their thoughts. In the third step, help students articulate what they are wondering by asking them what questions remain for them.

The routine generally works well in a group discussion. You may want to document the students' responses and post them in a place where all students can see them to encourage future consideration. When doing this as a group, you may want to ask students to try the routine quietly on their own first (perhaps documenting their own thinking in writing) before discussing in a group.

Share your experience with this thinking routine on social media using the hashtags **#PZThinkingRoutines** and **#SeeThinkWonder**.

PZ PROJECT ZERO HARVARD GRADUATE SCHOOL OF EDUCATION

VISIBLE THINKING

This thinking routine was developed as part of the Visible Thinking project at Project Zero, Harvard Graduate School of Education.

Explore more Thinking Routines at pz.harvard.edu/thinking-routines

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https://pz.harvard.edu/sites/default/files/See%20Think%20Wonder_3.pdf

Appendix G Checklist Parents & Teachers (Fabio,2019)

Tab. 2 - Cecklist Identificazione Plusdotazione

L'insegnante (o il genitore) deve valutare, per ciascuno dei comportamenti elencati qui sotto la frequenza con cui essi compaiono. Nella valutazione dovrà usare i seguenti valori: **1**= mai; **2**= molto raramente; **3**= raramente; **4**= tavolta; **5**= spesso; **6**= frequentemente; **7**= sempre

Nome e cognome o identificativo……Genere…… Età……	
ABILITA' INTELLETTUALE	
1. Il bambino/a mostra un vocabolario eccezionalmente sofisticato- inusuale per la sua età	
2. Il bambino/a parla molto fluentemente, in modo intellegibile ed espressivo	
3. Il bambino/a ne sa molto di più dei suoi coetani	
4. Il bambino/a sa risolvere problemi di aritmetica chiaramente troppo difficili per la sua età	
5. Il bambino/a ha una conoscenza molto ampia e specifica che va oltre la sua età – conoscenza corrispondente (astronomia, piante, animali, dinosauri, vulcani, computer)	
6. Il bambino/a apprende molto facilmente e velocemente. Non ha quasi mai bisogno di ripetizioni	
7. Il bambino/a legge molto per sua stessa volontà e preferisce libri che vanno oltre la sua età	
8. Il bambino/a mostra molto interesse per numeri e simboli	
Totale punteggio	
ABILITA' CREATIVA	
1. Il bambino/a ha molte idee	
2. Il bambino/a fa disegni molto interessanti	
3. Il bambino/a dà risposte insolite e fuori dal comune	
4. Il bambino/a ama inventare nuovi giochi	
5. Il bambino/a è molto curioso e si pone molte domande	
6. Il bambino/a si costruisce le sue opinioni indipendentemente dagli altri	
7. Il bambino/a ha una straodinaria capacità mentale (abilità di affrontare un problema sotto diversi punti di vista)	
8. Il bambino/a è in grado di trovare titoli estremamente inventivi per ogni attività (disegno, scrittura)	
9. Il bambino/a trova usi insoliti per gli oggetti comuni	
Totale punteggio	
ABILITA' SOCIALE	
1. Il bambino/a capisce abbastanza velocemente quando gli altri sono trattati ingiustamente	
2. Il bambino/a richiama l'attenzione degli altri in modo adeguato	
3. Il ambino/a riesce ad esprimere le proprie emozioni verso gli altri in modo chiaro	
4. Il bambino/a ama inventare nuovi giochi	
5. Il bambino/a riesce quasi sempre a influenzare positivamente gli altri (ad esempio, riesce a confortare gli altri quando sono tristi)	
6. Il bambino/a è pieno di riguardi verso tutti	
7. Il bambino/a riesce a mettere d'accordo tutti	
8. Il bambino/a può percepire le sensazioni degli altri in modo accurato e vario	
9. Il bambino/a ha molte idee su come risolvere i problemi sociali	
Totale punteggio	

https://doi.org/10.6092/2612-4033/0110-2215 -
https://cab.unime.it/journals/index.php/JCDP/article/view/2215

Appendix H Primary School – Diagram Frayer Adapted



Above example of 3°Primary: staying on a geometric meaning of area.



Above example of 3° Primary: confounding area with air.

Appendix I Personalized Learning Plan Developed (Italian PDP)

Piano Didattico Personalizzato a.s. _____

Classe
Scuola primaria/secondaria
Referente APC: Prof. _____ (Team BES)
Coordinatore/coordinatrice di classe: Prof. _____

1. DATI RELATIVI ALL'ALUNNA/O

Cognome e nome	
Data e luogo di nascita	
Identificazione specialistica	Redatta da _____ presso _____ in data _____ Specialista/i di riferimento: _____ Eventuali raccordi fra specialisti ed insegnanti: _____ Consegna della relazione cognitiva al Dirigente Scolastico da parte della famiglia in data: _____
Informazioni dalla famiglia	- Relazioni in famiglia e componenti: - Relazione con i pari (fare riferimento al *sociogramma di Moreno* e a quanto osservato in classe): - Interessi extra scolastici (formali e non: video giochi, musica, sport, associazionismo…): - Lingue di casa/famiglia (fare riferimento alla *biografia linguistica*):
Motivazioni prioritarie per le quali si rende necessaria la stesura del piano:	□ Attivare dinamiche di inclusione dell'alunno nel contesto della classe e nella relazione coi pari. □ Evitare i rischi di una disaffezione rispetto al lavoro scolastico, anche in singole discipline. □ Incentivare dinamiche motivazionali in ambiti di maggiori competenze. □ Valorizzare il rendimento scolastico. □ Sostenere la consapevolezza del sé e delle proprie risorse.

	□ Sostenere il processo di apprendimento più che il risultato espresso dal voto. □ Altro ……

2. **CARATTERISTICHE DEL PROFILO COGNITIVO** (fare riferimento al documento di valutazione cognitiva consegnata dalla famiglia)

INDICI DI COMPETENZA PERSONALE /AREE DI FORZA	**INDICI DI DEBOLEZZA PERSONALE/AREE DI DEBOLEZZA**

3. **OSSERVAZIONI DEI DOCENTI (per la primaria: togliere o aggiungere materie che non coincidono con quelle della secondaria)**

MATERIA	**AREA DI FORZA**	**AREA DI DEBOLEZZA**
ITALIANO		
STORIA		
GEOGRAFIA		
MATEMATICA		
SCIENZE		
INGLESE		
FRANCESE/ SPAGNOLO		
TECNOLOGIA		
ARTE E IMMAGINE		
SCIENZE MOTORIE		
MUSICA		
RELIGIONE / ALTERNATIVA		

4. **CARATTERISTICHE COMPORTAMENTALI** (specificare)

a. Collaborazione e partecipazione:
b. Relazioni con compagni e adulti:
c. Frequenza scolastica:

d. Accettazione e rispetto delle regole:
e. Motivazione al lavoro scolastico:
f. Capacità organizzative:
g. Rispetto degli impegni e delle responsabilità:
h. Consapevolezza delle proprie risorse e competenze:
i. Senso di autoefficacia:
l. Autovalutazione delle proprie abilità e potenzialità nelle diverse discipline:

5. **STILE DI APPRENDIMENTO EMERSO** SOLO PER LA SECONDARIA (fare riferimento a quanto emerso dal questionario sugli stili di apprendimento)

AREA A
Visivo verbale (___%): – visivo non verbale (___%) – uditivo (___%) – cinestetico (___%)
Eventuali osservazioni:

AREA B
Elaborazione delle informazioni secondo una modalità analitica (___%): – globale (___%)
Eventuali osservazioni:

AREA C
Esprime preferenze per il lavoro individuale (___%) o di gruppo (___%)
Eventuali osservazioni:

6. **STRATEGIE METODOLOGICHE E DIDATTICHE** (specificare)
   a. Incoraggiare l'apprendimento collaborativo favorendo le attività in piccoli gruppi.
   b. Predisporre azioni di peer-tutoring (sia per ricevere che offrire aiuto).
   c. Sostenere e promuovere un approccio strategico nello studio.
   d. Esplicitare le informazioni ed i collegamenti/interessi all'inizio di un nuovo argomento di studio.
   f. Promuovere inferenze, integrazioni e collegamenti tra le conoscenze e le discipline.
   g. Sostenere progetti e l'apprendimento per progetti, sia per singola disciplina che interdisciplinari.
   h. Esplicitare gli obiettivi di apprendimento e le tappe intermedie.
   i. Privilegiare l'apprendimento esperienziale e laboratoriale per favorire la riflessione su quello che si fa e stimolare la personale interpretazione (rendere visibile l'apprendimento - MTLV).
   l. Sviluppare processi di autovalutazione e autocontrollo delle strategie di apprendimento.
   m. Evitare compiti ripetitivi e che richiedano pura memorizzazione (possibilità di usare schemi/ tabelle/mappe).
   n. Attenzione ai tempi di apprendimento.
   o. Possibilità di ridurre la lunghezza di un compito/prova ma non facilitarne il contenuto, valutare compiti bonus sfidanti – oltre le competenze attese.

7. **OBIETTIVI DI APPRENDIMENTO O COMPETENZA DISCIPLINARE SPECIFICI** (compilare per le materie interessate)

	OBIETTIVO CONCORDATO	**CRITERIO DI VALUTAZIONE**	**VERIFICA A DUE MESI**
ITALIANO			
STORIA			

GEOGRAFIA			
MATEMATICA			
SCIENZE			
INGLESE			
FRANCESE/ SPAGNOLO			
TECNOLOGIA			
ARTE E IMMAGINE			
SCIENZE MOTORIE			
MUSICA			
RELIGIONE / ALTERNATIVA			

8. OSSERVAZIONI /COMMENTI DA PARTE DELL'ALUNNO/A

Riportare brevemente le osservazioni dell'alunno/a rispetto al piano didattico stilato: aspettative, timori, propositi…

9. PATTO CON LA FAMIGLIA

Gli insegnanti si impegnano:

1. a creare un clima positivo all'interno della classe dove è inserito l'alunno/a;
2. a far capire che l'apprendimento è un percorso e che tutto si può affrontare e superare; offrire tappe intermedie e dare indicazioni precise su come raggiungere gli obiettivi prefissati;
3. a sostenere la metacognizione;
4. a ridurre il carico di studio mnemonico individuale a casa;
5. a predisporre insieme all'alunno e utilizzare gli strumenti compensativi laddove essi siano necessari;
6. a rivedere in casi specifici la consegna con una che possa assecondare meglio interessi individuali ma senza semplificazione;
7. a valutare interrogazioni programmate che possano inglobare progetti di ricerca e interdisciplinari;
8. a verificare le competenze acquisite e a far emergere gli apprendimenti raggiunti;
9. a valutare l'alunno/a in modo costruttivo e formativo.

La famiglia si impegna a:

1. a comunicare alla scuola tutte le informazioni necessarie per meglio conoscere e condividere lo sviluppo educativo dell'alunno/a;
2. altro _____

Allegati e parte integrante di questo documento:
Indicare eventuali allegati (es. *Biografia linguistica, Luce e Ombra, Le voci nella mia testa, Luoghi importanti…*)

FIRME (Docenti – Alunno/a – Genitori – Dirigente Scolastico)