



## Research Article

# Perceptions of gifted students, mothers, teachers, principals and educator about school service

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### Abstract

Adequate specialized service for gifted children is essential so that each dimension of their cognitive, social and emotional development is met. Unfortunately, there are still schools that are not prepared to deal with the special educational needs of gifted children. This research is justified to reveal how gifted students are being served, if the way that schools offer their service meets the needs of these children. In this sense, this research seeks to investigate the perceptions of gifted students, their mothers, teachers, principals and regular classroom educator regarding school service, teaching strategies and the role of creativity in the education of these children. This article is not limited to the perceptions of students, teachers and families, but also seeks the perception of the management team. This article presents a qualitative and exploratory approach with semi-structured interviews, observations and a questionnaire that were used as data collection instruments with 3 gifted students, 2 mothers, 5 teachers, 2 principals and 1 regular classroom teacher, totaling 13 participants. The perceptions of gifted students, their mothers, teachers, principals and regular classroom educator regarding school attendance make an important alert to the schools surveyed so that the teaching strategies and educational measures being taken are reassessed, since the Most participants expressed dissatisfaction with the care provided to gifted children.

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## Introduction

In the current educational context, the gifted child is not identified most of the time, this fact prevents him from entering an enrichment program to develop his/her high abilities. This situation can become even worse when she is finally diagnosed as gifted and does not have access to adequate specialized service for his/her special educational needs (Renzulli, 2003, 2016; Peterson, 2014; Piechowski, 2014; Pfeiffer, 2015, 2016; Kane & Silverman, 2014; Gagné & Gagnier, 2018; Piske, 2013, 2018, 2020; Piske & Kane, 2020; Piske et al. 2020a, 2020b).

It is crucial to know how the specialized service to the gifted occurs, how the teaching strategies are offered to these children and about the development of creativity during the teaching-learning process. Only then will it be possible to identify whether these students are satisfied with the service they receive at schools and whether their classes develop creativity through the teaching strategies of the teaching staff. In this sense, this article seeks to investigate the perceptions of gifted students, their mothers, teachers, principals and regular classroom educator regarding school attendance, teaching strategies and the role of creativity in the education of these children. This article is not limited to the perceptions of students, teachers and families, but also seeks the perception of the management team.

For specialists in the field of giftedness (Gross, 2014, 2016; Peterson, 2014; Piechowski, 2014; Pfeiffer, 2016; Piske & Stoltz, 2018, 2020a, 2020b) there are cases where the gifted child it can be perceived by teachers as a student who

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questions too much, and their questions can be annoying during classes. Your classmates may also feel uncomfortable and interpret your curiosity and interest too much in learning how to show off. Whereas, she is thirsty to develop her high abilities (Winner, 1996; Silverman, 2000), and often wants to help people with her in-depth knowledge in her area (s) of interest. It should be noted that adequate school attendance for gifted children is linked to the development of creativity in this child's education (Renzulli, 2003; Renzulli & Reis, 2017; Besançon & Lubart, 2008; Robinson, 2013; Amabile, 2018; Plucker, Guo & Makel, 2018).

Satisfactory service means presenting creative and innovative teaching that excels in educational practices that instill curiosity and desire to learn (Csikszentmihalyi, 1996, 1998, 1999, 2007; Winebrenner, 2001; Clark, 2002; Renzulli, 2003; Piske & Stoltz, 2018; Thompson & Pfeiffer, 2020). The work with creativity is intrinsically related to teaching strategies, the way teachers prepare their classes and offer them to their students. For this reason, this article also aims to know the participants' perceptions regarding these strategies and how they perceive and define the creativity phenomenon.

### How to Work with Gifted Students?

Teaching to gifted children is quite complex and this complexity can unlock a range of possibilities for working with these students who have special educational needs. According to Winebrenner (2001), Kane (2018), Pfeiffer (2016), there are still teachers who have difficulties in dealing with giftedness of their students and who are limited to standardized teaching that, in addition to inhibiting their creativity, it makes them feel bored and frustrated.

Work with gifted people must occur based on their interests, so the teaching team needs to have a thorough knowledge of the areas of knowledge that most call their attention and present varied activities reaching the learning styles of their students, such as: style visual, auditory and kinesthetic (Khan, Arif & Yousuf, 2019).

As for the visual style, students will express skills that relate to the stimuli received visually. The teacher needs to prepare activities with images related to the content that instigates their curiosity and the desire to learn. Activities can be based on children's literature such as fables, videos on the area (s) of interest to students, drawings and paintings, among other possibilities.

In relation to the auditory style, the forwarding of the class should rely on the teacher's creative speech during explanations, videos, music and sounds that attract the attention of students, generating a large repertoire in the search and deepening of knowledge based on oratory and lots of sound with harmony.

Finally, the kinesthetic style needs body movement, dance, theater, games and play activities where students can move around to learn. All learning styles can count on playful work, there are several types of games that work with images, sounds and movement.

It is important for the teaching staff to encourage students to know themselves by identifying their potential and limitations. Teaching based on self-knowledge and knowledge of reality and the world will certainly expand the specific and general skills of both teachers and students. Class referrals must be linked to students' educational needs and must be meaningful according to their abilities.

For teachers to know students' skills, it is crucial that they look back and focus on the theory of Multiple Intelligences by American psychologist Howard Gardner (1995, 2006, 2007, 2011). The author proposes nine dimensions of human intelligence: linguistic intelligence, logical / mathematical intelligence, visual / spatial intelligence, bodily / kinesthetic intelligence, musical intelligence, interpersonal intelligence, intrapersonal intelligence, naturalistic intelligence and existential intelligence.

According to Gardner (1995, 2011) linguistic intelligence encompasses the domain of orality, the ease of expressing oneself, and allows people to express themselves and understand the world through language. Great thinkers and poets are examples of this oral expression ability. Students who identify with playing rhymes, puns, who always have a story to tell, who easily learn other languages.

The author explains that logical / mathematical intelligence is about the ability to deal with a line of reasoning, raise hypotheses, work with symbol manipulation and perform calculations. It allows the analysis of problems with logic; perform mathematical operations and investigate issues in a scientific and accurate manner.

According to Gardner (2006), visual / spatial intelligence, in turn, indicates the ability to recognize spatial patterns and compare with patterns in more confined areas. In this sense, the person has the ability to sharpen perception in relation to shapes and objects, in different angles and positions, also has the domain of elaborating and analyzing plants, maps, sketches, and representing them with precision. The virtual world is perceived in detail by the person with this domain.

When referring to body / kinesthetic intelligence, Gardner (2006), points to the ability of motor coordination with precision, can work with various objects using the motricity of the fingers and engage in activities that require full use of the body. To clarify, it is possible to exemplify through professions such as: actors, artisans, dancers, athletes, musicians, among others.

Musical intelligence is explained by the author as the ability to create and produce sounds and rhythms, play instruments and compose music with ease. The person who has this ability has the domain of distinguishing melodies, sounds, rhythm, frequency, timbre and intensity in a precise way.

For Gardner (2006), interpersonal intelligence is the ability to interact with people, to know how to deal well with interpersonal relationships with balance and harmony. Have the capacity for empathy and otherness. Understand the feelings of others, their emotional states, motivations, intentions, temperaments and attitudes.

On the other hand, intrapersonal intelligence is the ability to be in tune with one's feelings, to act with prudence, wisdom, intuition and intrinsic motivation, people like this act with self-confidence. They are people who have autonomy and independence to perform tasks.

As for naturalistic intelligence, the person with this ability is closely linked to nature and the environment. It dominates the classification of species that make up flora and fauna. His sensitivity is shown by the recognition of the diversity of the animal and plant world and of everything related to terrestrial life.

When encompassing other forms of intelligence, Gardner reports on the vision of being as an integral being. However, still under study to compose the other dimensions of human intelligence, existential intelligence can be defined as the capacity for reflection and understanding about the existence of life. Great philosophers and thinkers are examples of this dimension of intelligence.

Certainly Gardner, when creating his theory, gave us a great contribution to understand the skills we have and to understand the different forms of intelligence that surround us in the people around us. It should be noted that meaningful and creative teaching is based on the principle of adapting educational practices to the abilities that students have. If work is not related to the area of interest and abilities, it may not deliver the expected result and will not be effective. Many specialists (Winebrenner, 2001; Clark, 2002; Gross, 2014, 2016; Peterson, 2014; Kane, 2016, 2018; Pfeiffer, 2016; Piechowski, 2014; Piske & Stoltz, 2018) point out that there are several behaviors of gifted students that can signal your lack of interest in the teaching offered. It is possible to observe some of the following behaviors:

- Unfinished work can be the result of varied interests and an inability to narrow a topic. The wrong way of teaching can also reveal to students the feeling that they already know about a specific topic and do not feel the need for practice.
- Sensitivity to other people's attitudes and perceptions can make gifted children perfectionists or fear failure. These feelings can lead to unfinished work, procrastination, or failure to perform school tasks.
- Carrying out a task without much dedication is often a sign of lack of interest from the gifted students in the proposed subject. Gifted children may question the suitability of classroom activities for their needs, but they will work diligently and well on topics of high interest. Everything can be successful from the interest of these children.
- Gifted behavioral problems can result from boredom or the feeling that classroom work is too easy or below your expectations.
- Emotional outbursts or periods of gifted abstinence can occur due to their highly sensitive nature, their sensitivity can be heightened in relation to various everyday situations.
- Unsuccessful group work can generate negative feelings for the gifted students, that they will be in charge of the group's work. There are many cases where gifted children prefer to perform their tasks alone due to feelings that their ideas may be misinterpreted or not appreciated by the group.

These are some of the situations that demonstrate the difficulties of gifted students in their interpersonal relationships or during their school life. For this reason, it is essential that the teaching team reflects and reframes its work from the area (s) of interest of its students, researching and always looking for new teaching strategies to serve the gifted students in a creative and engaging way.

### **The Invisibility of the Gifted at School**

Invisible gifted students tend to be disadvantaged for social and cultural reasons. For Merrotsy (2013), there are cases in which gifted people are subject to performance inhibitors, which are powerful factors for not participating in school, not being involved in learning and not standing out in areas with regard to academic talent.

They may have low self-confidence in the educational system and their teachers, they may face the fear of failure, fight in the search for self-identity and are subject to enormous social pressures, such as the forced choice dilemma. Dealing with their own educational needs requires self-awareness of their potential and limitations, consciously or unconsciously, they can even mask their skills and often prefer to look like typical or ordinary students, not standing out in any way to avoid confrontations or frustrations, or to maintain their friendships, in this bias, some of them can reach an academic level well below the expected.

The lack of support for the gifted can explain their invisibility at school. Especially when the child finds himself lost in the midst of prejudices and confrontations, and the lack of importance that is attributed to his high potential.

Ashman & Merrotsy (2011) explain that there are several reasons that contribute to the development of gifted low-income, and these are related to school, the social environment, the social and cultural context and issues related to the search for identity. The authors point out that, first, within a school, giftedness may not be identified, not recognized and not valued; school circumstances, school structure and organization can be inflexible; the classroom environment can be rigid; and there may be a general lack of resources. Second, the child can live in an environment that presents an anti-gifted posture and an anti-intellectual atmosphere, with different beliefs and value systems, steeped in prejudices. Third, the child may not have cultural capital, such as beliefs, values and language, or social capital, for example, social relationships and networks, social norms and values and trust, may live in poverty or isolation and may have no choice. Ashman & Merrotsy (2011), point out that the child may not have confidence, be afraid of failure, be struggling in the search for self-identity, have low self-efficacy, be subject to the dilemma of forced choice or have a psychopathology. Two of these concepts, in particular, low self-sufficiency and the dilemma of forced choice, appear to be consistently present in gifted students who fail to develop academically.

In the Brazilian educational context, enrichment programs for gifted children have been gradually increasing, laws that guarantee the functioning of these programs are taken up by institutions interested in serving these children, however, in general, “with regard to actions, special education, has still been much more in charge of philanthropic, assistance and segregationist entities and institutions” (Heredero, 2010, p.194).

For the authors Pérez & Freitas (2011), the invisibility of gifted students by the population, including teachers, is basically explained by the lack of information on the area of giftedness and on the legislation that confirms the. However, “the phenomenon of high skills is still permeated by many myths and elitist conceptions that provoke contradictory reactions, which range from fascination to antagonism” (Chagas, 2007, p.15).

According to Martins & Alencar (2011), to work in the area of giftedness it is essential that the teaching team has access to specific training, which should include in their pedagogical proposal theories on the theme, information on typical behaviors of gifted and internships for observation and conducting in institutions that offer special care to these students. The authors explain that in relation to the desirable training of a teacher of gifted students, it is important that there is continuing education, the undergraduate curriculum adapted to the theme and postgraduate studies in the area. The authors also emphasize the need for a pedagogical and curricular proposal that includes the desirable characteristics of these teachers, on the part of educational institutions that offer specific training so that the teaching team can work in the area of giftedness. It is important that, in this training, theories on the topic are included, information on typical behaviors of students with giftedness and, if possible, internships for observation and conducting in institutions that offer special quality care to these students. Only then will the invisibility of the gifted be unveiled and the proper care for these students will reveal the erroneous ideas that society and many education professionals have when they think that the gifted students need not be attended and that their skills are already sufficient for them to develop alone. On the contrary, there is no progress in educating the gifted without meeting their special educational needs (NEEs).

If high abilities during the teaching-learning process are not recognized and valued by the school, educational opportunities and experiences necessary for optimal development are unlikely to be offered, which for many students results in poor performance, boredom and frustration.

Ashman & Merrotsy (2011), explain that if there is such an elusive gifted personality, the question of identifying the invisible gifted is in fact problematic. The authors argue that the proper identification of high potential, appropriate recognition and appropriate educational intervention will result in educational participation and academic engagement and will bring enormous benefits to affective development. These are the first steps for the invisible gifted student to

succeed in school. For this, it is necessary for the school to break the paradigm of offering standardized teaching and promote work that includes educational measures aimed at the high skills of its students that remain neglected.

### **Method**

This research seeks to investigate the perceptions of gifted students, their mothers, teachers, principals and regular classroom educator regarding school attendance, teaching strategies and the role of creativity in the education of gifted students.

This article presents a qualitative and exploratory approach with semi-structured interviews, observations and a questionnaire that were used as data collection instruments with 3 gifted students, 2 mothers, 5 teachers, 2 principals and 1 regular classroom teacher, totaling 13 participants.

As for the qualitative approach, Creswel (2007) considers it as a type of investigation focused on the qualitative aspects of a given question. In the case of this research, it is possible to highlight the subjective part of the problem when attending to the gifted child, his feelings and emotions, which often do not have material and personal resources for this service to occur properly.

Regarding semi-structured interviews, Creswel (2009) explains that these interviews are part of a more spontaneous method, in which the researcher asks some predetermined questions, the other research questions do not necessarily have to be planned in advance. The questions were focused on the care that gifted students receive at school.

In the descriptive observations, the attitudes and actions of gifted children involved in this research were considered, as well as how to act and speak in order to verify their satisfaction in the school space.

And finally, the questionnaire was used as an information collection instrument, to see if the school meets the special needs of gifted children. There was a question to mark x and three open questions, giving the participants the opportunity to write their answers regarding the care the children receive, the teaching strategies offered, and the importance of creativity in the education of gifted people.

Each instrument used sought to investigate school attendance to the special educational needs of gifted children, teaching strategies aimed at these children and the importance of creativity during the teaching-learning process.

### **Data Collection Procedure**

This research was carried out in the public school system of a municipality in the state of Paraná in 2015 and 2016. The research was carried out in two public schools. School names will not be released for ethical reasons. Each school will be named as: school A and school B.

As for school A, 1 gifted student, 1 mother, 4 teachers, 1 educator and 1 director participated. At school B, 2 students, 1 mother, 1 teacher and 1 director participated. Each participant had their name changed to preserve their anonymity. The criteria for participating in the survey were the availability of time and acceptance because everyone contributed voluntarily.

To access these contexts, a research project was initially filed for approval by the head of the office of the Municipal Secretary of Education and the person in charge of the Coordination for Assistance to Special Needs.

After authorization to start the research, contact was made with the schools surveyed that had been listed by the person in charge of Coordination for Assistance to Special Needs. The choice of schools where this research took place was made by the criterion of acceptance by the management teams of each of these teaching units. The principals of these schools were in agreement with this research and aware of the data collection procedures.

Contacts with the surveyed schools were carried out on the spot and by telephone. After the permission of the management teams to receive the researcher in the researched contexts, the researcher presented her project and the authorization document so that the directors could become aware of it and sign it. He also presented the terms of consent for all participants to sign, after the researcher's explanation of the research. This study started only after all participants signed the consent terms.

All instruments were applied in one of the regular teaching rooms of schools A and B. Participants were invited to participate in the interviews with an approximate duration of 30 minutes and to complete a questionnaire about school attendance to the needs of gifted children, about strategies of teaching in the teaching-learning process of these children and on the importance of creativity in teaching, since creativity can be considered by many scholars an essential aspect in the education of gifted (Amabile, 2018; Plucker, Guo & Makel, 2018; Kane, 2016; Kane & Silverman, 2014; Piske, 2013, 2018; Piske et al. 2020).

Observations were made during the application of the questionnaire and the interview and aimed to understand how the social and emotional interactions of gifted children at school occur.

### Profile of the Participants

When introducing the participants, care was taken to preserve their anonymity by modifying their names so that none of them were identified, in accordance with ethical research principles.

As for school A, there is the gifted student who will be called Geraldo, 9 years old, attends the 5th year of elementary school, has giftedness in the academic area.

Geraldo, the student's mother, Lúcia, is 29 years old, married, has completed high school. Regarding the profile of the 4 teachers at school A, professor Augusto is 35 years old, professor Marcela is 27 years old, professor Ana is 29 years old and professor Márcia is 33 years old. All teachers are married and have a higher education degree in Pedagogy. About the profile of the educator Neide, she is 37 years old and the director Joelma, she is 42 years old, both have worked at this school for more than 5 years. The total number of participants in school A is eight people.

In the context of school B, there are 2 students, Valmir and Renato, Luíza who is the mother of student Renato, teacher Eva who teaches to Renato and principal Aurélia. Valmir's mother and teacher chose not to participate in this research. The students are 10 years old, attend the 5th year of elementary school, have giftedness in the academic area.

Luíza, Renato's mother, is 28 years old and has a college degree. Renato's teacher, Eva, is 28 years old, and director Aurélia is 35 years old. Both have worked in the municipal education system for over 10 years.

It is important to note that all teachers who participated in this research will be able to teach gifted students in regular classrooms in the future, including students who took part in this study, even if they have no training in the area of giftedness. For this reason, it is essential to know the perception of these teachers in relation to the school attendance offered to these children, as well as about their teaching strategies.

It is noteworthy that the families and teachers of gifted students were invited to participate in this research, but not all had the time available.

### Data Analysis

After data collection, a thorough and repeated reading of all the material collected was carried out for the categorical realization of the results. According to Bardin (2011), the antecedents of content analysis refer to interpretative practices such as hermeneutics and rhetoric during the research process. We tried to list the psychological structures based on the participants' responses. According to Amado (2017), the application of the content analysis technique is a useful tool for interpreting the perceptions of social actors.

For the analysis, the participants' experiences and contexts were considered (Weiner, 2011; Oliveira, 2012; Minayo, 2013). According to Weiner (2011), Minayo, (2013), it is important to realize how the participants contribute meaning to the elements of their context. In this research, the elements highlighted were: school attendance, teaching strategies and the development of gifted students' creativity.

According to Weiner (2011), Oliveira (2012) to make the object a scientific construct it is crucial to invest in the accumulated national and international knowledge, dialoguing with or around it. Based on national and international studies of this research, a dialogue was sought between participants and specialists in the area of giftedness so that the design of the research is not based only on common sense, but to give the tone of a scientific discussion. A constant search was sought between the theoretical framework and the first influxes of reality, especially with regard to the school service received by gifted students, which does not always occur properly.

The step by step of this research is based on stages: the approval of the research by the municipal secretary of a Brazilian municipality; the contact with the contexts that depended on the acceptance of the direction of the researched public schools; the researcher's visit to the field to present the project; the meeting with the participants to present the research and sign the consent terms; the material collected; analysis and results. In this sense, there was an analytical and systematic path, to make objectification based on opinions, beliefs, values, representations, relationships and human and social actions possible from the perspective of actors in intersubjectivity (Weiner, 2011; Oliveira, 2012; Minayo, 2013).

The following categories were carried out after reading all the collected material and respond to how school attendance occurs, possibilities of teaching strategies, definition and importance of creativity during the teaching-learning process of gifted people from the perceptions of each participant of this research.

In the analysis of this study, the answers obtained in the interviews, observations and in the questionnaire were compared, based on the responses of the participants of the two schools, A and B.

The results of this research point to the participants' dissatisfaction, feelings of discontent and the need for advances in gifted education. First, the participants' perceptions of school attendance to the needs of gifted children will be presented, then the perceptions of these participants stand out. about teaching strategies in the teaching-

learning process and, finally, the participants' perceptions about the importance of creativity in the teaching of gifted people will be presented.

As this research is voluntary, there are questions that some participants chose not to answer, even though they were explained in detail by the researcher in case of questioning or doubt. Any discomfort was avoided, preserving a climate of harmony and respect.

### Results

In relation to school attendance to the needs of gifted children, the speeches of the participants emphasized that schools, in general, do not offer adequate attendance to these students. Of the 13 participants, seven believe that the school does not meet educational needs, three responded that the school does not and for three participants the service is satisfactory. Here are some speeches from the participants:

*"The school serves little" (Student Geraldo, school A).*

*"In view of the difficulty in the aspect of relationships that the child presents, at school I do not see the concern to include this child" (Lúcia, mother of student Geraldo, school A).*

*"The school does not attend because there is no curriculum specifically for gifted students, as it is not always that there are students with this profile" (Teacher Augusto, school A).*

*"The current school is unfortunately unable to meet the special needs that gifted students have" (Teacher Marcela, school A).*

*"The school meets the needs because it performs challenging and appropriate activities, as far as possible, due to having cases of children with other special needs in the classroom" (Teacher Ana, school A).*

*"Due to the number of students in the classroom and the content to be contemplated, there is a lack of opportunity to be able to arouse new interests in these students as well as appropriate moments and different materials" (Teacher Márcia, school A).*

*"The school serves schooling at the basic, regular level of education. For these (gifted) students there is a need for specific assistance in the areas of high skills or giftedness" (educator Neide, school A).*

*"We provide guidance to professionals for referral of cases with ADP (Psychoeducational Diagnostic Assessment), in the classroom, through different planning, with different materials" (Principal Joelma, school A).*

*"I think they don't give the matter so much importance" (Student Valmir, school B).*

*"Answer, because the teachers help the student to develop more" (Student Renato, school B).*

*"The school does little work. There were projects in which my son would participate, but I lack direction and psychological support to improve my son's development" (Luíza, mother of student Renato, school B).*

*"We still need to advance in relation to the use of technology and expand the training of professionals who serve these (gifted) students. This work requires the participation of the state, the school and the family" (Teacher Eva, school B).*

*"Unfortunately, the school's physical and human structure is not sufficient to meet the differences as a whole. More investment by the State is needed, financially, as well as in public policies" (Principal Aurélia, school B).*

The lack of contentment on the part of the majority of the participants reveals that an inclusive school goes beyond offering a place to the gifted student. Successful inclusion needs to guarantee not only access, but permanence and academic success, necessarily implying adequate support to the needs of students (Mendes, Vilaronga & Zerbato, 2014). But then, what would an inclusive school be?

*An inclusive orientation school is defined as one in which each and every student has their place in the classroom, integrated with living with diverse age pairs, seen as individuals as they are, without having to present a pre-determined to define which group of colleagues they should belong to. To follow this guidance, it is up to the school institution to learn how to deal with the diversity of students, accepting them as human beings, citizens, members of society and the community. Implicitly, this concept assumes an attitudinal and effective commitment by the school to offer each child what he/she needs to develop and improve, either individually, in groups or subgroups, at school or in the community. In this line of thought, actions that would result in submitting entire classes of students to the same pedagogical treatment would not be accepted, in principle [...] (Guenther & França-Freitas, 2014, p. 167).*

As for teaching strategies in the gifted learning process, participants, in general, believe that teaching mediation reflects the student's development in a meaningful way by preparing activities that address the needs and interests of this child. The strategies mentioned are quite varied, below, it is possible to highlight some of them that could be used by the teaching team from the interviewees' statements:

*"Some strategies would be: projects, robotics, deepening in mathematics, Portuguese, geography, history, arts, etc." (Student Valmir, school B).*

*"Hardware and software, Informatics, robotics" (Renato Student, school B).*

*"After identifying the skills, I believe that the strengths should be analyzed and work on them persistently, for greater development of the child. There must be room and specific studies, very well prepared teachers would also contribute a lot in the formation of the gifted student" (Lúiza, mother of a gifted student, school B).*

*"We know that each student has a better learning style, some are more visual, others are more auditory. Thus, teaching strategies should be as varied as possible. These students should be encouraged to contribute to classes through their experiments, research and discoveries" (Teacher Eva, school B).*

*"I believe that looking for challenging strategies, especially in areas where this student has greater ability" (Principal Aurélia, school B).*

*"Activities where the child can expose his ideas without limits, without direction, where he can create without worrying whether he is in the context or whether it is correct or wrong" (Lúcia, mother of student Geraldo, school A).*

*"It is necessary to know the student well, his characteristics and needs in order to develop an action plan specific to him. I believe that exchange activities and relationship dynamics, as many gifted children have difficulties in relate to their peers" (Teacher Ana, school A).*

*"I believe that activities that arouse the child's interest and creativity should be offered. Activities that require reasoning and reflections about problem situations" (Teacher Márcia, school A).*

*"More targeted classes would be needed in your area of giftedness with specific materials, increasingly stimulating your skills" (Teacher Marvella, school A).*

*"I find important activities more focused on logical reasoning, which require a lot of thinking. More advanced individual activities for students with special needs" (Teacher Augusto, school A).*



*"In addition to regular education, each specific student will benefit from a methodology or strategy depending on the need and area of giftedness. Strategies that address a greater number of sensory channels facilitate the learning of all students" (educator Neide, school A).*

*"In resource rooms, students receive specific assistance according to the area of prominence, but in a regular room, teachers explore all areas of knowledge with activities that span all learning styles, offering something more in the case of students with high skills (Principal Joelma, school A).*

According to the National Association for Gifted Children, "National Association for Gifted Children" (NAGC) (2020), a world reference in the gifted education, strategies for teaching the gifted should include a good curriculum and instructions for these students, it is practically impossible to develop the talent of a highly capable student with a bland curriculum and instruction. Like all students, talented students need rich learning experiences. That is, they need learning experiences organized by the main concepts and principles of a discipline, and not by facts.

It is important to create teaching strategies that meet the individual needs of gifted students. Highly able students often learn more quickly than others of their age. As a result, they typically need a faster pace of instruction than many of their colleagues. The activities offered to these students must necessarily be linked to their area (s) of interest. These strategies should propose a higher degree of difficulty than for many students their age. That is, a higher degree of difficulty requires more skills - more refined skills - applied to a higher level of sophistication.

Strategies for teaching gifted children require full support from the teacher at all times. Gifted students succeed without much effort and learn more easily. So, when a teacher presents a challenging task, students may feel threatened. In this bias, it can be seen that they probably did not learn to study hard, take risks and make an effort, it is up to the teacher of gifted students to understand this situation and, therefore, needs to invite, persuade and insist on risk, but in a way that supports the success and motivate your students.

Regarding the definition and importance of Creativity in the education of gifted children, the participants adopted several concepts to define it. From the understanding of the interviewees, this attribute can be related to an intrinsic skill, imagination, innovation, invention, the expression of "divergent" thinking, among other issues. All participants recognize the importance of this attribute in the education of gifted people, emphasizing that creativity generates the motivation to learn, freedom of expression, the skills to innovate, the autonomy to invent what is imagined, overcoming the obstacles imposed by teaching standardized. The following are the interviewees' reports:

*"Creativity is related to activities where the child can expose his ideas without limits, without direction. Where he can create without worrying whether he is in the context or whether it is correct or wrong" (Lúcia, mother of student Geraldo, school A).*

*"It is creating activities, whether concrete or abstract, that benefit and arouse the interest of the gifted student. It is important to motivate him to always seek information more and more, in his field of knowledge" (Teacher Augusto, school A).*

*"Creativity is using your skills to create and innovate. All of this must be taken into account when we work with gifted students, as they often present very creative resolutions for different situations" (Teacher Marcela, school A).*

*"Creativity is the differentiated ability to solve challenging situations. Creativity is of paramount importance in the education of gifted people, because only then will it be possible to develop quality work and with the perspective of achieving the best results" (Teacher Ana, school A).*

*"Creativity is within everyone. It is up to the environment in which the person is and the experiences lived for him to be awakened. It is essential that creativity is awakened in education, including gifted ones" (Teacher Márcia, school A).*

*"I believe that the teacher who takes care of gifted children needs creativity to meet the student's needs. In addition, he needs to facilitate and stimulate the student's creativity. Creativity is the ability to create and innovate, to do differently what already exists and to create new things" (educator Neide, school A).*

*"Creativity is the expression of thoughts, it needs a lot of encouragement, materials for the composition of ideas, information about different techniques, opportunities to expose your thoughts. Letting any student create his ideas is to allow him to grow as a being in formation. The students gifted people need opportunities to demonstrate their creativity" (Principal Joelma, school A).*

*"I think the limit of creativity is imagination. It is important for the future of the gifted child" (Student Valmir, school B).*

*"Creativity is when you see one thing and start to imagine another. It means a lot. Without creativity, there would be practically no gifted" (Student Renato, school B).*

*"It is to develop easily, to solve clearly. Demonstration of ease to perform tasks. It is necessary to work intensively to develop this creativity, bringing extremely positive results to the goals of the gifted student" (Luíza, mother of student Renato, school B).*

*"It is the capacity for creation, imagination of something innovative. Another way of seeing the world. Usually, the gifted are very creative and need space in the school environment to expose all their creativity" (Teacher Eva, school B).*

*"Creativity is the ability to overcome challenges, to create strategies to overcome obstacles. This attribute is fundamental for the development not only of students with high skills, but of all students" (Principal Aurélia, school B).*

The definition attributed to creativity by participants is in line with the most current research on this phenomenon (Csikszentmihalyi, 1996, 1998, 1999, 2007; Renzulli, 2016; Sternberg, 2016; Plucker, Guo & Makel, 2018; Kettler, Lamb & Mullet, 2018; Thompson & Pfeiffer, 2020; Piske & Stoltz, 2020a), all recognize that creativity provides several benefits for the education of gifted students, among them: intrinsic motivation, autonomy, divergent thinking, freedom of expression, courage to face new challenges. To foster creativity in the classroom, there are new and current suggestions that Thompson & Pfeiffer (2020) list below:

- Cultivate a psychologically safe, ridiculous space and create a rewarding environment for unusual questions, answers and creations. In addition, try to limit formal and rigorous assessment procedures to purely creative activities.
- Ensure that the physical space of the classroom is safe, comfortable, interesting and stimulating. Consider outdoor activities.
- Emphasize freedom during exercises focused on the imagination, allowing students to daydream, play, move and determine their own design parameters, hoping to develop their passion for specific activities.
- Protect and prioritize time for creativity in the classroom. Perhaps even more important, think of ways to incorporate creativity-creating strategies into your curriculum and lesson plans.
- Make expectations of creativity explicit. Students do not always understand when and to what extent it is desirable to use their imagination.
- Explain about innovation-based work. Students need to understand that true achievement often stems from prolonged effort, in addition to trial and error.
- Provide many examples and models of artistic and creative works. Don't forget to include yourself as an excellent and accessible model of creative attitudes and products.
- Incorporate well-designed group work to help students develop ideas collectively. Successful groups usually have guidance and monitoring from a teacher and also involve some sort of individual processing time.

It is up to the teacher to adapt the school space and his classes according to the needs of his gifted students. This requires creative and engaging work where he can promote activities that arouse his students' curiosity and willingness to learn. For this, it is important for the teacher to ask questions in the classroom and find out about his areas of interest. From then on, he can prepare and deepen his knowledge through courses, training and specializations according to educational needs of gifted children. Kane (2016) highlights important characteristics of the research literature on effective teachers of gifted students. These characteristics can be categorized in terms of personal and social issues; the issue of teaching strategies; and the intellectual-cognitive issue.

According to the author, the personal / social characteristic of the gifted teacher is important so that he/she can identify and know the cognitive, social and emotional needs of the gifted; possess a sense of humor; be excited; be culturally responsive.

As for teaching strategies / approaches, the gifted teacher needs to have skills to differentiate the curriculum from gifted students; employ strategies that encourage higher-level thinking; encourage students to be independent learners; provide student-centered learning opportunities; creating a learning environment that does not threaten different ideas; be well organized.

The intellectual-cognitive characteristic of the teacher who works with gifted people, must have in-depth knowledge of the subject of interest to their students; have broad interests, usually literary and cultural; having above average intelligence preferably; be a lifelong learner, think creatively; and possess excellent communication skills.

### **Conclusion**

The perceptions of gifted students, their mothers, teachers, principals and regular classroom educator regarding school attendance make an important alert to the schools surveyed so that the teaching strategies and educational measures being taken are reassessed, since the Most participants expressed dissatisfaction with the care provided to gifted children.

If the attendance in these schools is not recognized as satisfactory by the participants, it is essential that the management team, principals and educators, refer these students to enrichment programs to develop their high skills according to their area(s) of interest. Otherwise, these children may have different difficulties. They will probably be frustrated by standardized teaching that does not encourage creativity, on the contrary, it only reinforces what they have already learned. It is possible that they feel lonely for not interacting with their peers, this fact can cause social and emotional difficulties. In addition, they will not develop their high potential because they are inserted in a context that requires teacher training in the area of giftedness to understand how it would be possible to develop teaching appropriate to their special educational needs.

Inadequate care relies on the need for teaching strategies that focus on the development of creativity through practices based on innovation. According to Thompson & Pfeiffer (2020), the teaching team can create an environment responsive to the needs of gifted students and their creativity, cultivating a psychologically safe school space, free from reprimand and barriers that impede the development of the creative potential. The teacher can create a rewarding environment of unusual questions, answers and creations. You can limit formal and rigorous assessment procedures to purely creative activities, ensure that the classroom's physical space is safe, comfortable, interesting and stimulating, incorporate well-designed group work to help gifted students develop ideas with their peers for this, successful groups need guidance and monitoring from a teacher who gives them collective and individual support whenever necessary.

In addition, teaching strategies may be based on Howard Gardner's theory (1995, 2006, 2007, 2011). This theory allows for teacher reflection beyond self, the desire to teach and exercise educational practices that are often random. It is possible that many teachers do not teach reflecting on their skills and abilities of their students, for this it is necessary to self-knowledge, self-analyze and analyze the results obtained that are being put into practice. The multiple intelligences make us realize our potentials and limitations, advances and regressions, make us reflect on who we are and how we act, and give us a basis for evolution.

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