



## GIFTEDNESS: A SURVEY ABOUT BRAZILIAN CHILDREN AND EDUCATOR'S (MIS) CONCEPTION<sup>i</sup>

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### Abstract:

This study aimed to identify the number of gifted children, and the teachers' (mis) conception about giftedness. The study was carried out in public schools in the city of Bauru in the state of São Paulo, Brazil. Data was collected by asking teachers to fill in a standardized form about the characteristics of gifted children and to answer a questionnaire agreeing or disagreeing with assumptions regarding gifted students' behavior. The research was carried out with 111 teachers from elementary school: 82% with a major degree in pedagogy and 22.5% with a post-graduation (lato sensu) course. This research revealed important and relevant data that may be used as guidelines to plan teacher development courses and seminar on the subject, including that 29% of the teachers have little knowledge on the subject; 36,9% teacher were currently teaching gifted students and 93,6% of them had students with three or more characteristics of

<sup>i</sup> SUPERDOTACIÓN: INVESTIGACIÓN SOBRE NIÑOS BRASILEÑOS Y LA CONCEPCIÓN (ERRÓNEA) DE EDUCADORES

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giftedness in their classes. Gifted children were mostly reported in Arts (19.82%), secondly in logical reasoning (5.41%), and thirdly in intelligence (4.5%).

**Keywords:** giftedness, elementary school, special education, teachers

**Resumen:**

Este estudio tuvo como objetivo identificar la cantidad de niños superdotados y la concepción (errónea) de los maestros sobre la superdotación. El estudio se realizó en escuelas públicas de la ciudad de Bauru en el estado de Sao Paulo, Brasil. La fecha se recopiló solicitando a los maestros que rellenen un formulario estandarizado sobre las características de los niños superdotados y que respondan a un cuestionario de acuerdo o en desacuerdo con los supuestos sobre el comportamiento de los alumnos superdotados. La investigación se realizó con 111 docentes de la escuela primaria: 82% con especialización en pedagogía y 22.5% con un curso de posgrado (lato sensu). Esta investigación reveló datos importantes y relevantes que pueden usarse como pautas para planificar cursos y seminarios de desarrollo docente sobre el tema, incluido que el 29% de los maestros tienen poco conocimiento sobre el tema; el 36.9% de los maestros actualmente enseñaban a estudiantes superdotados y el 93.6% de ellos tenían estudiantes con tres o más características de superdotados en sus clases. Los niños superdotados se informaron principalmente en Artes (19.82%), en segundo lugar en razonamiento lógico (5.41%) y en tercer lugar en inteligencia (4.5%).

**Palabras clave:** superdotación, escuela primaria, educación especial, docentes

## 1. Introduction

There are many theories and assumptions about the concept of gifted students. Alencar (2001) reports that the terminology may suggest different connotations to different people. It may refer to a genius, an individual who really has an extraordinary and unique performance in a particular area of knowledge, a young inventor who surprises for registering a new pattern, a student who consistently ranks among first in class or a child who learned to read without any help. According to the author giftedness also suggests a specific talent in music, literature or fine arts. In all cases, students have in common a remarkable performance or great skills.

Teachers must know the characteristics of the gifted child in order to identify and deal with them in school. In this way, it is necessary to clarify assumptions and beliefs related to the topic. Winner (1998) points out that there are three main characteristics of children with giftedness: *Precocity* – they take the first steps into a field of interest, earlier than the average. They also make progress faster than the ordinary children do, because they are fast learners. *An insistence on doing things on their way* – they require minimum help from adults because they usually learn by themselves. A

*Fury to dominate* – they show an intense and obsessive interest in a given area and a high ability to focus sharply.

According to Sabatella (2005), there are three main features in gifted children: unusual well-structured vocabulary; high level thinking, high reasoning skills with the use of pure logic and an outstanding memory with mnemonic components from an early age. For Piirto (1999 *apud* Almeida & Capellini, 2005), these individuals have a high ability to create, watch and learn fast and accurately, in various directions of human culture.

The Brazilian core document *Diretrizes gerais para atendimento educacional aos alunos portadores de altas habilidades/superdotação e talentos* (Brasil, 1995) states the general guidelines for the education of the gifted children. It defines giftedness as a series of behavior that attests for "*consistent superior traits of prodigy*" in relation to the average students, taking into consideration student's age, performance or school grade, in any subject. Traits should be understood as an individual's consistent and frequent way of being or doing similar things throughout a period.

The document is an initiative of the Brazilian government aimed at assuring gifted students with the right to quality education and assistance. However, there is a lack of studies and researches in order to give the document the effectiveness it deserves (Gonçalves & Fleith, 2011).

According to Winner (1998), it is easier to identify gifted children within a formal educational environment, such as language and mathematics, and in the artistic fields of visual arts and music, because they tend to be attractive to those fields.

Cupertino (2008) explains that gifted individuals may have asynchrony ability, being good at something and having difficulty in others. It is unusual to find individuals who are gifted in different fields simultaneously. For example, a person may have intelligence above the average and motor performance below the expected for his/her age. This is also pointed out in the book *Saberes e Práticas da Inclusão* (Brasil, 2006), which emphasizes that students can have significant performance in some areas and medium or low performances in others, depending on their type of giftedness.

Considering that this is a relevant topic to the daily classroom practice, the objective of this research was to identify the number of gifted students in elementary public schools in the city of Bauru, state of São Paulo – Brazil, and teachers' conception of giftedness.

## **2. Material and Methods**

This research comprised sixteen elementary public schools in the city of Bauru. 208 questionnaires were applied to teachers and 111 returned with complete answers.

The study applied a sample survey method with quantitative variable, because its purpose was to carry out a roundup of children with characteristics of giftedness and to verify the conception of teachers on the subject. Data was collected, analyzed, grouped by frequency and the results were presented in tables and graphics. There was

also a qualitative approach of analyses in order to deepen the study of the collected data.

The main data collection methods were:

- 1) **Participants Identification Form** for teachers (Rodrigues, 2012) – with name, address, contact numbers and email address; name, address and telephone number of the school where the participant teaches; questions regarding professional and personal characteristics of the participants, such as: age, gender, marital status, academic background, public or private school in which he/she teaches, number of students in the classroom, experience as a teacher, and grade levels that he/she teaches. There was also a blank space for personal observations where participants could use to add any extra information.
- 2) **Questionnaire for teachers** (Rodrigues, 2012) – with questions about the teachers' knowledge on the subject.
- 3) **“Follow up Guide for gifted and talented children observation”** - *Guia de observação de crianças dotadas e talentosas* (Guenther, 2013), used to identify some behaviors that can be indicators of giftedness.

### 3. Results and Discussion

The data collected from the forms and the questionnaires were analyzed and organized into graphics and tables.

Table 1 presents the educator's knowledge about students with giftedness, their expertise in the field and their previously experience with this kind of students.

**Table 1:** Participants' profile

Questions	Participants (n. = 111)					
	Y	%	N	%	NA	%
Teachers' instruction on giftedness during graduation or continuing education program	30	27.03	79	70.27	3	2.70
Teachers that consider having knowledge on giftedness	33	29.73	75	66.67	4	3.70
Teachers that consider to have already taught gifted students	37	33.33	76	67.57	3	2.70

**Note:** Y= affirmative answer; N= negative answer; NA= no answer.

**Source:** elaborated and translated by the authors.

The results showed that 70.27% of educators/teachers reported they had never attended courses on the subject. Most of them said they had little knowledge on the topic (66.67%) and only 33.33% of them said they had already taught gifted students in their career.

An interesting fact is the participants' answers related to specific continuing educational courses on giftedness: almost all of them (91%) revealed that if they were invited to take courses on the subject they would be interested in participating. These are some of their responses on the topic:

*"Nowadays I do not know about this 'theme'. I've studied about gifted children 16 years ago, however, because I have not been in such situation, I didn't need to deepen the theme. Because I have the knowledge that things can "change", evolve, I feel unable to answer the questionnaire." (Teacher 7 – Translated by the authors)*

*"I have to study more about giftedness. It's usually most expected to have children that are behind than in advance." (Teacher 11 – Translated by the authors)*

*"Giftedness is a rarely approached subject, in opposite to hyperactivity and learning disabilities, which are frequently discussed nowadays. We need more clarification and reports." (Teacher 37 – Translated by the authors)*

*"I believe a course that approaches this issue is very relevant. Since children inclusion is happening in the educational process, we are, or I rather consider myself, late on the subject." (Teacher 107 – Translated by the authors)*

As noticed, most of the teachers are willing to discuss to the topic, but feel insecure in doing so. In Brazil, as mentioned by one of the teachers, this topic is hardly ever included in undergraduate courses and in seminars offered to teachers at the beginning of their careers. That takes us to consider that many talented students haven't been identified by their teachers. According to their answers to the "Questionnaire for teachers", displayed on Table 2, it's possible to observe their knowledge on the definition of the theme.

**Table 2:** Categorization of participants' responses

<b>Definition of giftedness</b>	<b>% (n. = 111)</b>
Did not know how to conceptualize giftedness.	49,5
It means to have above-average performance, excelling in any field of knowledge, without being directly related to IQ.	21,6
It means to have above-average performance and it's related to an above average IQ.	10,8
It means to have high skills.	8,1
It means to have above average skills in several or all areas.	3,6
It means to have a lot of interest and commitment to something.	1,8
It's an innate ability developed by stimulus from the environment.	1,8
It's an individual with cognitive capacity beyond the grade that he/she attends to at school.	1,8
It's the one with abilities on problem-solving.	0,9

**Source:** Elaborated and translated by the authors.

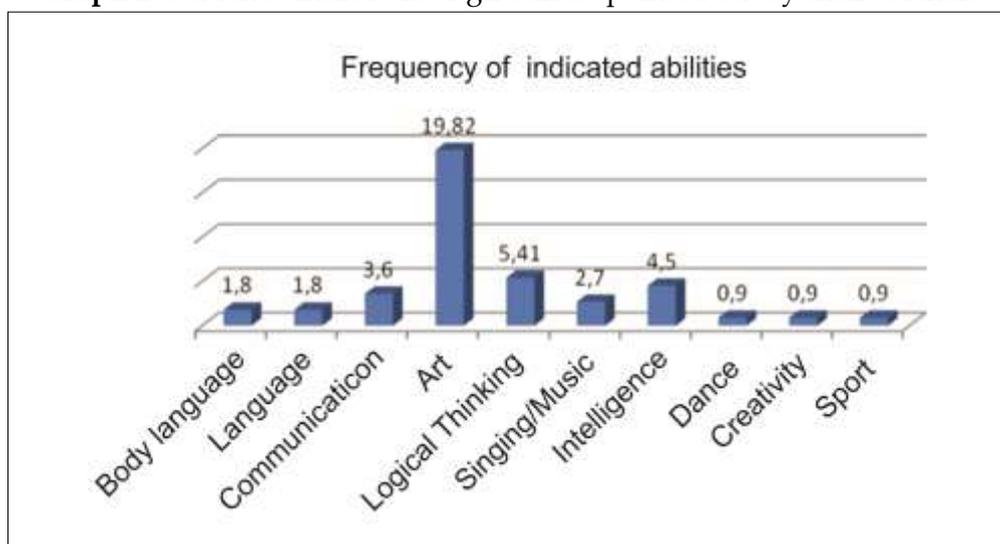
According to data, 21.6% of participants believe that giftedness are related to an above-average performance in any area of knowledge and without a direct relationship with the IQ; in other hand, 10.8% gave the same answer, but relating it to an IQ above the average, which shows different points of view on the topic and difficulty to understand who this target is.

It's also important to verify that almost half of participants (49.5%) were not able to define the theme which demonstrates that they still don't have much information or are insecure on this topic.

These findings match Lima and Moreira's (2012) research conducted in Pará state, located in the North of Brazil. They observed that many teachers had a limited knowledge of Brazilian legislation on special needs education and that most of the teachers didn't consider that a gifted student would have special educational needs because they were able to learn easily.

This research also requested teachers to analyze their own students' performances in the classroom. Among all participants, 41 teachers answered to have students with different abilities. Graph 1 shows the categories in which teachers indicated the indicators of giftedness of the 47 students named.

**Graph 1:** Students' indicators of giftedness pointed out by their teachers



(Source: Elaborated and translated by the authors.)

The categories in the graphic were written exactly as named by teachers. The most pointed one was arts, 19.82%, the second most mentioned was related to logical thinking, 5.41%, and the third was intelligence, 4.5%. The remaining items had little percentage, between 1 and 2%. Besides the ones in the graphic, three other teachers said they had students with indicators of giftedness but they did not answer in which area and it was not possible to characterize them.

Brazilian Educational Ministry (Brasil, 2008) considers students with giftedness those who demonstrate high potential in any of the following areas: academic, leadership, psychomotricity and arts, separated or combined. Also, in terms of creativity, those students show high creativity, high commitment to learning and to executing activities related to their area of interest. By grouping the talents cited by teachers according this definition, it's possible to observe that creativity is still considered a separated ability, as indicated by the participants.

**Table 3:** Subject and areas

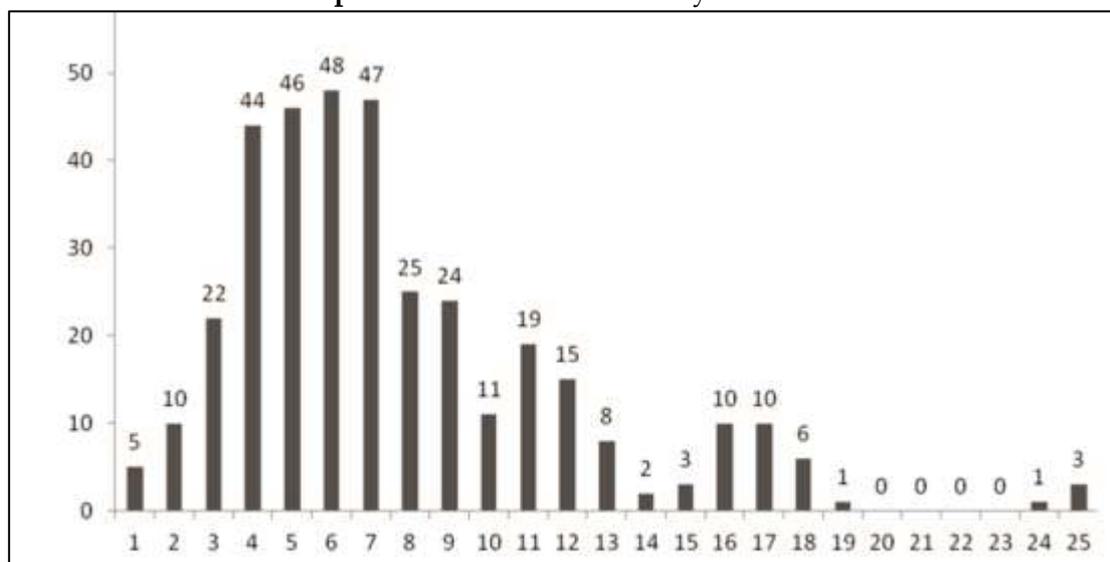
Areas of giftedness	% of students
Academic	11,71
Leadership	3,6
Psychomotricity	3,6
Arts	22,52
Creativity	0,9

**Source:** Elaborated and translated by the authors.

According to the classification based on the official government document mentioned and described in Table 3, arts is still the talent most observed by teachers in their classrooms (22,52%), followed by academic one (11,71%), leadership and psychomotricity (both with 3,6%), and the less noticed by teachers was creativity (0,9%). We attribute low creativity rate to the fact that in Brazil creativity is not taken as a condition that contributes to learning, but as an individual aspect.

Teachers were also requested to indicate students who most stood out according to the indicators presented in "Follow up Guide for gifted and talented children observation", with 25 items, as best students in Math, Languages, Science, Arts, extra-class activities, and the most independent, creative, persistent, kind, confident, lonely ones etc. Those data are presented in Graph 2.

**Graph 2:** Number of students by indicators



**(Source:** Elaborated and translated by the authors.)

Three hundred and sixty students were named by their teachers. The items in which teachers named more students were: 6 – very curious and interested (48 students), 7 – engaged in all activities (47 students), 5 – talkative (46 students), 4 – best ones in extra classes activities (44 students). Some items had less than five students related to them: 14 (sensitive and kind with friends), 15 (concerned about the welfare of friends), 19 (friendly and liked by colleagues), 20 (lonely and ignored), 21 (funnier), 22 (best one in sports) and 23 (best one in handcrafts and motor skills).

Sixty eight students were indicated by their teachers in more than 10 topics and other 60 were scored between eight to ten indicators, so a more complete assessment is suggested. According to Virgolim (2007), the student who has several of these characteristics has a strong likelihood of being gifted.

It is important to enhance that, although many students have been pointed by their teachers in some indicators and some of them may actually be gifted, Alencar (2001) emphasizes that these students will not always have a good school performance because there is often a discrepancy between the potential (what the person is capable of performing and learning) and the real performance (what the individual demonstrates to know).

Therefore, it is extremely necessary the watchful eye of the teacher to identify students with potential indicators of giftedness in order to help them to fully develop their talents and abilities. It is important to highlight that only teacher development opportunities and proper classroom environment will allow for careful observation and diagnosis of these students. Moreover, it is a great need to investigate ways to identify those students and to propose pedagogical methods and activities to help them.

#### **4. Conclusion**

This research aimed to survey the number of children with indicators of giftedness according to their teachers as well as verify educators' opinion on the topic in a city of Sao Paulo state. The obtained data confirm other author's results, especially regarding the little knowledge by teachers about the theme, either by a deficient initial qualification or because of the lack of specific continuing study courses in the field. Results point out to participants' interest in learning more about giftedness which indicates a necessity of governmental investments in teacher's qualification as well as more researchers helping teachers to identify gifted students at school.

It is also important to highlight that education must considerate the needs of all students, including the ones who learn more easily in a specific area. Students with giftedness are also target of special education policies in Brazil and are supposed to be stimulated to develop their potential; after all, the talent that is neither identified nor stimulated may end up being lost.

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