



## Learning difficulties and school inclusion: contemporary theories and practices under debate

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### SUMMARY

The central theme of this study is to highlight theoretical and practical aspects regarding specific difficulties in school learning, as a multi-causal phenomenon, from an interdisciplinary perspective, with the aim of understanding how the construction of reading and writing knowledge occurs, as well as the development of logical mathematical reasoning by the child.

The methodology adopted was descriptive qualitative research, which made it possible to reach results on how to explore inclusive pedagogical strategies and practices with a view to providing school support to students with learning difficulties. Notes were raised in order to characterize four specific learning difficulties, among those most frequently found in the literature: dyslexia, dysgraphia, dysorthography and dyscalculia. Thus, the starting point was the contributions of scientific theories related to this area, observing, thus, the current state of the art of research on the subject, by revisiting or reviewing research and discussions already published on the topic. To support these questions, the theoretical framework of authors who problematize this theme was sought.

**Keywords:** Learning difficulties; School inclusion; Pedagogical practice.

### ABSTRACT

The central theme of this study is to highlight theoretical and practical aspects of specific learning difficulties at school, as a multi-causal phenomenon, from an interdisciplinary perspective, with the aim of understanding how the construction of reading and writing knowledge occurs, as well as the development of logical mathematical reasoning by children.

The methodology adopted was descriptive qualitative research, which made it possible to reach results on how to explore inclusive pedagogical strategies and practices with a view to providing school support to students with learning difficulties. Notes were raised in order to characterize four specific learning difficulties, among those most frequently found in the literature: dyslexia, dysgraphia, dysorthography and dyscalculia. Thus, the contributions of scientific theories related to this area were used as a starting point, observing the current state of the art of research on the subject, by revisiting or reviewing research and discussions already published on the subject. To support these questions, the theoretical framework of authors who problematize this theme was sought.

**Keywords:** Learning difficulties; School inclusion; Pedagogical practice.

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## 1- INTRODUCTION

Initially, it is necessary to understand that learning difficulties are refer to a disorder that can be generated by a series of cognitive problems or emotional that can affect any area of school performance, thus, the learning disability refers to a range of problems that can affect any area of the child's performance. In this light, many different aspects can harm brain function and psychological problems in these children are generally complicated. Thus, the present study has the main objective discuss the challenges and possible inclusive practices in the Brazilian educational scenario, highlighting, for delimitation and analysis purposes, four learning difficulties, dyslexia, dysgraphia, dyscalculia and dysorthography.

Education from an inclusive perspective requires certain changes in the teaching process. learning, mainly because of facing numerous barriers of all kinds political, social, economic and even cultural. In this perspective, the process of inclusion of students with specific difficulties, disorders and/or disturbances presents itself as a challenge, with teachers being the facilitators and mediators of the process learning of students, and should therefore be the promoters of new proposals for teaching, more inclusive (ROCHA, 2017). From this analytical horizon, Fernández (1991, p. 47) asserts that, in order to learn, two characters are needed, a teacher and another learner and a bond that is established between both.

Certainly, these considerations are relevant, as this study deals with these difficulties. specific learning experiences that preschool children go through, with emphasis on the difficulties most frequently encountered in technical literature, as mentioned above. Regarding this, Correia (2008) highlights that the difficulties of learning concerns the way in which the child processes information, leading to taking into account their abilities and achievements. Thus, learning difficulties specific can manifest themselves in the areas of speech, reading, writing, mathematics, or problem solving, involving motor, perceptual, language problems, thinking, memory or metacognitive.

## 2- THEORETICAL FRAMEWORK

It is worth noting that there is no single cause that determines learning difficulties, but there is a combination of factors that act against a child's predisposition, that is, therefore, a phenomenon caused by multiple factors. So that such a vast theme, relevant and complex requires further discussions in the political, social and academic. In this perspective, some scholars emphasize affective aspects, others prefer to point out perceptive aspects, many still justify this situation by claiming there is immaturity in the nervous system. It is clear that the lack of identification and Early intervention in specific learning difficulties can lead the individual to present significant difficulties throughout life.

In this way, it is believed that learning difficulties arise, for example, from from social factors, which are problems that originate in the social environment and economic situation of the individual, such as sudden changes of school, city, separation from parents, lack of social interaction, drug involvement, family disorganization and emotional. Thus leading to a weak attention span, in which the child easily distracted, loses interest and may leave work unfinished.

Additionally, there may be difficulty with language, slow acquisition of vocabulary, difficulty following oral instructions, problems with spelling and writing, difficulty in arguing. Likewise, due to distraction, the child may lose the lesson or even objects of his own, with the lack of motor skills, the child seems clumsy and without coordination. In this sense, Bee (2011) highlights that

Some children with normal IQs and essentially good adaptive functioning do not however, they have difficulty learning to read, write or do math. The typical label for this problem is learning disability – a term widely used to describe a unexpected or unexplained problem in learning to read, spell or count and more precisely used to refer to a neurological dysfunction that causes these effects. (BEE, 2011, p. 439).

From an organic perspective, according to the author in question, learning difficulties are neurological disorders that interfere with the reception, integration or expression of information, characterized by a disparity between the expected potential of the student and their academic performance. From this perspective, Valle (2008) points out that learning disorders learning are specific disabilities due to the impairment that affects

the child when processing and interconnecting information and responses in the various regions of the brain, as well as with regard to perception and the nervous connections that interconnect various brain regions and relate them to memory and affective sensations and motors.

From this perspective, learning difficulties refer to a set of problems that may affect some area of academic performance. It may interfere with skills and performance of students, who face obstacles or barriers in school context. From preschool and throughout the school journey it is possible identify the symptoms of specific learning difficulties in the child, however, having learning difficulties does not mean that she does not like to study. So overcoming these difficulties requires appropriate teaching strategies and professionals trained, and partnership with the family is essential. In fact, Fernández (2001, p. 62) states that different instances, situations and people fulfill a function teacher.

That said, in line with Moysés (1994), it is up to teachers to combine technical-pedagogical competence to a great commitment to giving the best of oneself with the aim for students to learn in a rich and meaningful way, especially when they have to teach those labeled as “those who are beyond help”. It is worth noting that in this process of development and overcoming of students with learning difficulties, the Teachers have a fundamental role and must contribute to forming capable human beings to make a difference in the world. Therefore, teaching practices that recognize and develops the student's skills and knowledge, valuing their abilities.

To this end, according to Cury (2003), it is necessary for the teacher to adopt in the classroom class a more inclusive approach with strategies and instruments that reach the specific needs of the student, especially when they have difficulties, in with the aim of developing in him wisdom, sensitivity, affection, serenity, love for life, the ability to speak to the heart and influence people, among other aspects. It

is unassailable to consider that inclusive pedagogical strategies are valid, aiming make classes more motivational and dynamic, not labeling the student, but giving opportunity for the student to discover and develop their potential, considering their real level of knowledge and enabling them to learn at their own pace, to therefore, adapting teaching to the characteristics of each student, that is, taking into account



their cognitive and personal characteristics, as each individual is unique and brings with them different life stories.

Using flexibility in planning when necessary, developing strategies that facilitate student learning in the areas of attention, concentration, self-esteem, interpersonal skills, motivation, speech and language, sequencing visual and auditory, memory, sense, direction, space, visual-motor skills, organization, interaction, reflection and logical mathematical reasoning. Thus, it is necessary that the teacher proposes different, creative, fascinating and motivating activities, in search for alternatives and solutions that facilitate student learning, helping them them, being the mediator in what the child does not yet know how to do alone, but will be able to do to carry out on your own.

In this line of interpretation, it is imperative to agree with Tiriba (2005) when he states that the joint action of educators and other members of the school is essential to ensure that care and education happen in an integrated way, since it is not possible educate without taking care of the child in his/her particularities, disregarding him/her as if presents in the classroom, as it behaves. In the same way, the process educational is essentially and primarily an action of care. In view of this, it becomes a partnership between everyone is necessary for the well-being of the student, with the adoption of appropriate pedagogical guidelines and practices.

From the above, it is clear that education and care complement each other, as playful literacy and literacy activities should be developed, from an individualized perspective, aiming at the integral development of children preschool, which characterizes educating, at the same time, attitudes of care and attention to little ones also need to be carried out for each of them specifically, with quite frequently, in everyday life. Which shows that educating and caring are actions that meet individual needs and therefore must be in line with the education, making it necessary to introduce changes both in special schools and in regular (AINSCOW, 1995, p. 18).

In this regard, it is extremely important that parents and teachers are in constant communication. It is also important to realize the importance of the school find ways to integrate into the family, seeking to solve the difficulties of learning in early childhood education together, school and family, so that the partnership family and school is a fundamental factor in preventing school failure, since learning difficulties interfere with the student's academic performance, as has already been



said. It is therefore necessary to create a harmonious, pleasant and favorable classroom space to the learning of all children, establishing a connection between the contents, relating what the student has already learned and what he is learning<sup>2</sup>.

Generally, students with learning difficulties feel rejected by their peers, therefore, education professionals have an important role in identifying and discovery of these problems, so that by observing the student and helping their process learning, the most appropriate treatment aims to correct and alleviate symptoms, as well how to restore self-esteem, valuing creativity, spontaneity and interactivity, with the aim of providing quality of life and autonomy so that child creates strategies that enable success in their tasks, which would previously be extremely difficult.

In this sense, the field of education from an inclusive perspective can offer a contribution to education in solving this problem, because a healthy and normal life is totally possible for those who are diagnosed as having some type of disorder learning. So that dedication, respect, mediation, exchange and affection are fundamental elements in children's education, thus, learning is constructed through a set of situations involving family care and activities guided by teachers, forming a significant whole in the process integral development and learning of the child. However, it is observed that there is, historically, little progress has been made in the area of public policies for school inclusion. In short, to address these issues that are increasingly present today, this study was divided into four parts, in order to characterize the types of difficulties specific learning, addressing dyslexia, dysgraphia, dysorthography and dyscalculia, without disregarding other possible disorders. In this context, the methodological division of labor for study purposes, that is, with the aim of contributing for a better understanding of the object investigated.

## 2.1 - A look at Dyslexia

In order to characterize that, currently, the needs of students with learning difficulties specific learning disabilities are increasingly present, the types of disabilities learnings that most tend to cause problems are those that affect, among others

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<sup>2</sup> Saying that the child must construct his own knowledge does not imply that the teacher sits back, ignores himself and leaves the child entirely alone. The teacher can create an environment in which the child has an important role and the possibility of deciding for himself how to carry out the responsibility he has freely accepted (KAMII, 2002, p.50).



aspects, visual perception, language processing, motor skills fine and the ability to focus attention. In this way, the child who presents learning difficulties, for the most part, present several symptoms, such as loss of initiative, anxiety, as well as difficulties in interpersonal relationships, thus, significantly impacting different areas of life.

That said, one of the types of learning disorder that is addressed in this study is Dyslexia, being a specific reading disorder, can occur in different degrees: mild, moderate and severe. Therefore, there is a difficulty in the correspondence between poorly recognized graphic symbols and poorly identified phonemes. It prevents the student from be a fluent reader, as he/she exchanges or omits letters, inverts syllables, presents slow reading, skips lines when reading a text, confusion of asymmetrical letters, inversion of syllables, omissions of graphemes and syllables, among other characteristics. About this, Soares (2001) states that it is necessary to incorporate the practice of reading and writing into activities that require these practices.

Along these lines, this difficulty in reading words has a neurobiological origin and affects the learning and instrumental use of reading, resulting in problems at the level of phonological awareness, that is, the awareness that spoken words and written forms are made up of phonemes. It is characterized by a compromise in the reading mechanism, which can be reflected in written expression. It is a difficulty in decode the written stimulus or graphic symbol, which can be observed independently of the intelligence quotient of individuals. So that some signs of dyslexia in children can be noticed even in preschool.

A dyslexic child may present characteristics such as difficulty in selecting appropriate words to communicate, both orally and in writing, poverty of vocabulary, difficulty in articulating ideas, spelling incorrectly, loses track reading, presents problems of semantic understanding in the interpretation of texts, confuse, invert and replace letters, syllables or words, in addition, it can present difficulties with mathematics and manual dexterity, which may be associated with other specific learning difficulties.

In this bias, depending on the degree of severity of the disorder, it compromises the ability to read and write fluently and correctly to understand a text, to different degrees not are able to associate phonemes with letters, in general they have difficulty in reading, writing and spelling, understanding of written text. Treatment, in general multidisciplinary, presupposes a long process that demands persistence, as the





Dyslexics may feel inferior at school due to their greater difficulty in learning.

In this light, long and complicated questions should be avoided during the assessment.

of learning, as the child may take longer to try to understand the question than to give the answer.

In this sense, encourage the student with dyslexia to reflect and seek to develop in the educational, cultural and personal spheres is one of the fundamental tasks of education. Considering that children with learning difficulties, in addition to have poor academic performance, may develop feelings of low self-esteem and inferiority. It is important for the teacher to plan activities aimed at specific difficulties of the student, with a view to overcoming frequent errors. To this end, respect, Paín (1992) asserts that the child is an evolving being, so it is urgent overcoming the symptom, given that your destiny is at stake. About this, I found also important contribution elsewhere.

We are human because we learn to be. We are born lacking instincts, fragile, unadapted to the environment, but full of possibilities. This conjunction is one of the sources where drinks human intelligence, because the lack we suffer from is not of activity or creative power. We need another human to receive us, want us and recognize us as one of them, even if we are not a passive object of the other who serves us. (FERNÁNDEZ, 2012, p.225).

Given the above, the student with dyslexia disorder as an evolving being has potential for learning, for this you need to see meaning in what you learn at school, the content must be part of your experience, your daily life and reality. In view

Furthermore, the teacher is the mediator between the child's relationships and the social universe where interacts, enabling the construction of conditions so that it can develop its capabilities related to cognitive, affective-social and psychomotor aspects, leading him to overcome their difficulties, being a challenge for the school and educators to transform students with learning difficulties into motivated students. For Moraes (1997, p.4), these activities that promote student action are a concrete way for them to exercise their actions in a meaningful and constructive way and not just develop the intelligence through a simple record of observations.

From this perspective, the role of the educator is to ensure that students with learning difficulties overcome their limits is to inquire, question and problematize, highlighting what they can do, because from a very young age children with dyslexia disorder present attitudes of interest in discovering the world around them, they are curious,



investigative and want answers to their whys, the educator's job is to stimulate and guide the experiences they experience and bring from the extra-school context, to that they build their own knowledge autonomously and, thus, raise their hypotheses about the reality around you.

## 2.2 - A look at Dysgraphia

It is possible to find children whose academic performance is impoverished compared to what was expected by their parents and teachers, especially with regard to written expression, due to learning difficulties, in this aspect, the weak performance represents the starting point for diagnosing the difficulty or learning disorder. Thus, it is considered a specific learning difficulty writing, dysgraphia, that presented or perceived when the child writes the answers of their schoolwork, in order to exemplify. So the concept is comprehensive and includes problems arising from the individual's own characteristics or from influences environmental.

From this perspective, dysgraphia is a writing disorder, characterized by problems in written language, can even appear in children with adequate development emotional and affective, where there are no problems of brain damage or even injuries sensory. These individuals are wrongly classified as having low intelligence or even incapable, with the disorder being confused by parents and teachers as a lack of attention in the classroom. Which makes it necessary to praise the productions of student, especially when writing correctly, working on affectivity and self-esteem. In this regard, the contribution made by Fernández (1991) is relevant, especially when highlighting that the learning problem that constitutes a "symptom" or an "inhibition" takes shape in a individual, affecting the dynamics of articulation between levels of intelligence, desire, organism and the body, resulting in an imprisonment of intelligence and corporeality by the unconscious symbolic structure. (FERNÁNDEZ, 1991, p.82).

The causes of dysgraphia can be related to laterality and psychomotor efficiency, involving motor skills and balance, characterized by children clumsy from a motor point of view, with irregular writing in terms of pressure, speed and stroke, as well as perceptive-motor disturbances, in structuring,



spatial orientation and internalization of the body schema. Likewise, factors of personality and psychoaffective factors can determine the appearance of the graphic, as the subject reflects in writing your emotional state and tension. Strategies such as observation of notebooks with dictations and spontaneous texts help detect the incidence of errors.

Pedagogical causes may be associated with rigid and inflexible teaching, such as inappropriate change from printed to handwritten letters or excessive emphasis on quality and speed of writing, for example. Other causes may be disorders in gross and fine motor skills, lack of coordination between what the child proposes to do and what it accomplishes. In addition to disorders in visual-motor coordination, understood such as difficulty in visually monitoring the movement of the upper limbs and lower, or deficiency in temporal-spatial organization or even problems in laterality and manual dominance.

It is worth noting that, often, learning difficulties leave students paralyzed in the face of the educational process, labeled by their own family, professionals education and peers. Generally, children who have this difficulty in regarding the writing of words, they are unmotivated with school tasks, having feeling of inability and frustration. However, learning difficulties are different from a lack of desire to do schoolwork, for this reason, it is important that professionals who work with young children are attentive to these difficulties, with the aim of helping them to obtain concrete results.

About this, Carraher (2002) points out that when the student gives his answer even if wrong he is in fact thinking and, often, even thinking well. One should not let to praise the child for his/her effort, aiming to stimulate him/her, positive reinforcement of handwriting of the child. In this sense, a child in the process of learning to write naturally presents difficulties in tracing letters, must have guidelines necessary to write properly, avoiding the permanence of incorrect strokes, which may develop into dysgraphia, that is, presenting altered writing.

To this extent, in line with Ferreiro (2001, p. 17), it is necessary for the teacher value the spontaneous productions carried out by students, as these are the activities which more clearly indicate their explorations to understand the nature writing, this path being something very valuable that needs to be interpreted and evaluated.



Thus, for this author, as the student is the point of reference for structuring the teaching activities that take place in the classroom, and are therefore the subject of learning, the knowledge it produces, with its mistakes and successes, must be considered in their pedagogical practice.

Therefore, it is a problem that affects the quality of the subject's writing, with regard to tracing or spelling, so that the child presents a writing that deviates from the standard, that is, poor handwriting, poorly differentiated letters, poorly designed and poorly provided. Dysgraphia as a deficiency in the ability to write firstly in terms of handwriting, but also in terms of coherence. So that the subject often presents scribbled handwriting. It occurs inability to remember the spelling of the letter, that is, trying to remember the spelling or not be able to make a connection between the symbolic system and the spellings that represent sounds and letters, words and sentences.

Children with learning difficulties suffer from a combination of factors in that their weaknesses are more pronounced and are in the areas that most tend to interfere in the acquisition of basic reading, math or writing skills. The child with dysgraphia may present with excessively large or small letters; shape of letters unrecognizable; exaggerated and thick line or too soft and imperceptible; shaky graphics or with marked irregularity, causing variations in the grapheme sizes; writing too fast or too slow; irregular spacing of graphemes letters or words; they may also demonstrate other behaviors associated with other specific learning difficulties.

### 2.3 - A look at Dysorthography

In light of the specialized literature, dysorthography is a writing difficulty that affects the learning, especially with regard to the orthographic representation of words (BARBEIRO, 2007, p. 118). Although often associated with dyslexia, dysorthography is distinguished as a specific learning disorder that manifests itself in errors recurring spelling errors, in addition to other characteristics that compromise the quality of writing and structuring their ideas. Thus, dysorthography manifests itself in errors recurring spelling errors, in addition to other characteristics that compromise the quality of writing. Among the main difficulties, according to Barbeiro (2007), the following stand out:



exchange of letters and words, textual disorganization, reading and writing difficulties, interpretation and memorization.

In this context, Sampaio (2009, p. 129), in his studies, details some examples that can occur when this difficulty arises, such as letter exchanges similar, the confusion of syllables, additions and omissions of letters, fragmentations and inversions and word junctions. In addition to spelling errors, individuals with dysorthography may present incomplete, poorly structured and poorly punctuated sentences, lacking essential elements for understanding, in addition to the repetition of words and reduced vocabulary. Lack of awareness about one's own textual production is also common. It is important for both managers and teachers to recognize the challenges that dysorthography imposes on the teaching-learning process.

Intervention in dysorthography must consider the student's age group and education level.

In this way, as dysorthography can manifest itself in different ways, Barbeiro (2007) divides it into three main types, namely, phonological dysorthography, that is, difficulties with phonological processing in writing words, with the sounds of language and grapheme/phoneme correspondence; superficial dysorthography, which refers to spelling problems caused by difficulty in recognizing and processing visual forms of words, not accessing their long-term memory; and the mixed dysorthography, which is characterized by presenting problems related to application of spelling rules, to writing, to the phonological pathway and to phonetics. In addition to these classifications, Torres and Fernández (2002, p. 86) list seven types of dysorthography, each with specific characteristics, namely, temporal dysorthography, perceptual-cenesthetic dysorthography, kinetic dysorthography, visuospatial, dynamic dysorthographia, semantic dysorthographia and dysorthographia cultural. Without disregarding that dysorthography is not a disease, but rather a specific condition that can be overcome by the action of the subjects themselves, being very favored when there is adequate and directed monitoring by professionals in school. Early identification of dysorthography, in this sense, can allow appropriate measures are taken.

Given the constant transformation of the educational process today, teachers need to increasingly rely on inclusive practices that value heterogeneity, paying attention to the difficulties encountered in the classroom. Thus, for Zorzi (2008), the assessment of spelling should provide information about the child's spelling level, indicating the spelling difficulties and the most frequent errors, aiming to improve writing. In this



direction, Sánchez-Cano and Bonals (2010, p. 306) emphasize that there are instruments that are more effective in assessing spelling skills, allowing observe the transcription of the auditory code onto the graph, the correct separation of the words and the degree of assimilation of spelling rules.

In this context, the role of the teacher is of utmost importance in achieving a more inclusive education in their teaching task. Through grounded practices, This professional can support students by developing means and strategies that greatly favor the learning of individuals with difficulties. The teacher can identify the persistence of spelling errors beyond what is expected for the stage of development in which the student is. It is essential, therefore, that the teacher sees the student's difficulties as a constant challenge. In this sense, the pedagogical work based on inclusion is a powerful tool for interfering positively in the integral development of students, playing a role fundamental role in mediating learning in this process.

#### **2.4 - A look at Dyscalculia**

It is important to consider that multiple factors contribute to the difficulties of learning of preschool children, so that recently many research investigates the causes of learning difficulties. In this regard, it is believed that if in the presence of a neurological dysfunction, which may involve the emotional, injuries specific to the brain, changes in brain development, hereditary factors or chemical dysfunctions. Thus, it is important to note that difficulties and disorders of learning that occurs in childhood always has a strong impact on the life of the child. child and his/her family, for the social damage they cause and to all areas of personal development.

According to Kamii (2002) active and autonomous mental participation is fundamental for learning, especially in everyday classroom situations and in group games.

In this sense, the social environment in which she lives may be excluding her and thus harming her their development, may, for example, feel underestimated for not achieving the result expected by parents and teachers, to that extent, this failure affects the being in all its dimensions, personal and social. Among these disorders, the most notable is dyscalculia, as a difficulty concerning the development of reasoning logical mathematician.



In view of the above, scientists are still trying to understand the causes of dyscalculia, there are indications that it is a congenital or hereditary problem, with context neurological, dyscalculia does not specifically have a single cause, but a set of them, and dyscalculia can, for example, be observed in individuals whose intelligence is normal, do not have hearing, visual or physical disabilities, but who fail in logical mathematical reasoning, which is below the average expected for their chronological age, intellectual capacity and level of education<sup>3</sup>.

In line with this perspective, Fernández (2001) states that

The problem of learning is an alienating and immobilizing reality that can present themselves both individually and collectively. Factors that intervene in their production they concern the socioeconomic, educational, emotional, intellectual, organic and physical aspects. (FERNÁNDEZ, 2001, p.26).

To this extent, children who have this learning disorder, in a way, general, they do not identify the signs of the four operations and do not know how to use them, as well as do not understand problem statements, measurement systems. At this point, for Kamii (2002) "difference is a relationship created mentally by the individual when relating two or more objects" (p. 14). Given this, the child with this specific difficulty in learning must feel safe, welcomed, stimulated so that they discover that they are capable to learn. In this regard, Valle (2008) emphasizes the importance of taking into account the pace of each child in their learning process, since each of them has characteristics that are particular to it.

In general terms, it is worth highlighting that dyscalculia disorder affects the construction of mathematical knowledge by children in their learning process, are difficulties in quantity conservation, numerical sequencing and ordering of facts. It is the difficulty in calculation and numbers. Specific problems related to mathematical knowledge reaches both children and adults. It can be detected in young children and steps can be taken to address this problem in schooling process. The teacher's intervention involves the assessment of classroom activities, complemented by targeted observation of behavior and student attitudes.

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<sup>3</sup> Logical-mathematical intelligence is manifested by the ability and sensitivity to discern logical or numerical patterns and the ability to work with long chains of reasoning (ANTUNES, 2009, p. 17).

It is necessary to understand that the problem may be the way mathematics is taught, so that the methodology developed by the teacher may be difficult understanding by the child. Mathematical knowledge goes beyond teaching calculations. The tangram is a suggested activity that provides a problem situation for treatment of dyscalculia. From this perspective, dyscalculia is a dysfunction neuropsychological that interferes with the learning of arithmetic and creates difficulties for deal with calculations and everything that involves logical sequence. Thus, it is interesting to note, from this theoretical basis, that the dyscalculic has specific learning difficulties in mathematics, to perform mathematical operations, specific neurological disorder affects the ability of a person understand and manipulate numbers, inability to perform mathematical operations or arithmetic, inability to conceptualize numbers as an abstract concept of comparative quantities. An alternative intervention is the use of posters with letters and numbers spread around the room, encouraging the child's visual memory. Another alternative is the use of games, since, according to Fernández (1991, p. 165), there is no there can be construction of knowledge, if one does not play with knowledge, considering the game, not an act, nor a product, but a process. Within the dyscalculic problem, the child may present frequent difficulties with the numbers confusing the operations of addition, subtraction, multiplication, division; problems differentiating between right and left; inability to tell which of two numbers is greater; difficulty in tasks that require numerical sequencing; difficulty keeping count during activities. In addition to confusion about the sense of time; poor ability to count; difficulty recognizing numbers and mathematical symbols; difficulty in memorizing mathematical facts; lack of sense of direction, difficulties with spatial orientation, difficulties with measurement principles, difficulties in storing information, difficulties in relating graphemes mathematical to their respective quantities and auditory symbols.





### 3- METHODOLOGY

It is important to consider that the methodological procedure adopted in this descriptive qualitative research<sup>4</sup> is the bibliographic review, through the return to the research sources, from reading books, articles and theses related to the theme of difficulties specific learning. In the search to understand these texts, we proceeded to analysis of their discursive resources, taking into account the social context in that were produced. In this direction, the theoretical-methodological conception that underpins the study on the issues affecting possible forms of intervention in specific learning difficulties, can be found in authors such as FERNÁNDEZ (1991, 2001, 2012); CARRAHER (2002); SOARES (2001); FERREIRO (2001); BEE (2011); PAÍN (1992); and CORREIA (2008), among other researchers on this topic.

It is clear that in order to promote the learning of students with learning difficulties, learning, the adoption of intentional and well-founded pedagogical strategies is crucial.

As this study does not intend to exhaust the possibilities for discussion on the subject, more appropriate materials were chosen and aspects raised considered relevant regarding the sources concerning the specific difficulties of children's school learning. In this context, the focus that emerged was the analytical approach, seeking to interrelate this bibliographic material selected by the line of theoretical research of the respective authors. Under such qualitative perspective<sup>5</sup>, the present study can provide a basis for developing explanations about more inclusive interventions in the educational process. It is worth highlighting that this research addressed sources, which involve generalizations, analyses, syntheses, interpretations and evaluations of the original information, which made it possible to reach results and conclusions that may be useful for future research.

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<sup>4</sup> According to Martins (2010, p. 53), description is of great importance in the development of qualitative research, in which all data from reality are considered important and, therefore, the researcher must pay attention to the greatest possible number of elements present in the situation investigated.

<sup>5</sup> *In the qualitative approach, the concern with the process is much greater than with the product, so that the researcher's interest is to verify how a given problem manifests itself in activities, procedures and daily interactions.*

*Thus, we sought to systematically portray the complexity of the issues inherent to learning difficulties in everyday school life (LÜDCKE, 1986, p. 12).*



#### 4- FINAL CONSIDERATIONS

It is important to consider that this research sought to outline the possibility of the teacher adopt more inclusive practices, which may interfere with skills and performance of students, who face obstacles or barriers in the school context. From this perspective, in light of the analytical basis examined in the study, it became clear that throughout the entire process school it is possible to identify and intervene in learning difficulties specific to students. Hence the importance of providing a rich and diversified stimuli and practices of reading, writing and mathematics, from preschool, observing the child's procedures during the proposed activities, since the learning difficulties refer to a set of problems that can affect some area of academic performance.

It is important to emphasize that it is important to propose pedagogical activities from the beginning of the formal schooling, as these intentional practices can bring countless benefits benefits to children, if planned, supported and developed through a approach that prioritizes playfulness, breaking with traditional conceptions of schooling that prioritizes content and memorization, helping them, being the mediator in what the child does not yet know how to do alone, but will be able to do on your own. For clarification purposes, the more playful the space is provided to the child, with the aim of building knowledge of reading, writing and mathematics, will contribute more to becoming a creative, autonomous and affectionate child, which means using games, jokes and music to facilitate understanding and participation, among other possible actions.

In summary, it is worth highlighting that in this study it was possible to reflect on the challenges and possibilities of teaching when working from an inclusive perspective with children who present specific learning difficulties. Not categorizing the child who faces difficulty as "abnormal", without removing children from school, due to consideration the "strong" or "weak". Without losing sight of the fact that access to education and the right to learning are constitutional guarantees for all as a duty of the State. In order to that the results obtained can be used to develop a theory, taking into account that learning is possibly an important process that all people go through human beings, so that the act of learning is related to social development and cultural of humanity and it is something complex.

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