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Pedagogical strategies for students with low vision: a bibliographic study

Pedagogical strategies for students with low vision: a bibliographic study

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Summary

This work has the general objective of presenting pedagogical strategies aimed at students with low vision, and to develop this objective it is essential that the specific objectives are laid out on a solid theoretical basis. Firstly, we will conceptualize low vision, for this we will use for reference authors such as: Domingues; Oak; Arruda (2010), Lima (2006), ICD 10 on the classification of visual impairment; Romagnolli; Ross (2008), Sá; Fields; Silva (2007), Orrico; Canejo; Fogli (2013) and Machado (2009), shortly after, it will be discussed which legal mechanisms guarantee inclusion for students with disabilities and later we will discuss which pedagogical strategies can be used in the regular classroom for students with low vision. This research is qualitative in nature, based on bibliographic and documentary references that are announced later in the text. Through this research it was demonstrated that there is a range of visual changes that need to be known in advance so that there is an adequate use of pedagogical resources, and that the materials can be adapted so that they can contribute to the development of teaching and learning for students with low vision.
Key words: Pedagogical Strategies, Low Vision, Inclusion.

Abstract

This work aims to present pedagogical strategies directed to students with low vision, and to develop this goal it is essential that the specific objectives are arranged on a solid theoretical foundation. At first we will conceptualize the low vision, for this we will use for reference authors such as: Domingues; Oak; Arruda (2010), Lima (2006), ICD 10 on the classification for visual impairment; Romagnolli; Ross (2008), Sá; Fields; Silva (2007), Orrico; Canejo; Fogli (2013) and Machado (2009), shortly thereafter, will be discussed about which legal mechanisms guarantee inclusion for students with disabilities and later we will discuss which pedagogical strategies can be used in the regular classroom for students with low vision. This research is qualitative in nature, based on bibliographic and documentary references that are announced in the advance of the text. Through this research it was demonstrated that there is a range of visual changes that need to be previously known for the proper use of teaching resources, and that the materials can be adapted to contribute to the development of teaching and learning of students with low vision.

Keywords: Pedagogical Strategies, Low Vision, Inclusion.

1. Introduction

This study aims to offer contributions regarding the work for students with low vision in the regular teaching classroom. To this end, a bibliographic and documentary survey was carried out with the aim of enriching our studies on this topic and emerging new perspectives and possibilities for a practice aligned with the real world. conditions and needs of our students. The social relevance of this research lies in the sharing of knowledge that could benefit both teachers in the classroom regularly as parents of people with low vision so that they articulate theory with practice in an attempt to guarantee a adequate teaching inside and outside school.

Considering that the number of enrollments in special education has been growing annually, it is important that the college has a database available that allows access and assessment by users who are interested in the subject at hand. Furthermore, more research and writings related to special and inclusive education.

During my graduation I had the opportunity to participate in an extension project at UFPa, which allowed me to experience the daily life of basic school and I was able to accompany a student with low vision for a period of one year, this was the first step towards writing my work. course completion, which allowed me more curiosities about the

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subject in question and mainly interest in continuing research through specialization, given that I realized the importance of thinking about the construction of a curriculum and spaces that enable the appreciation of diversity, so that students have the minimum necessary conditions to have access, participation and permanence at school, their rights need to be ensured, in an attempt to contribute to a less exclusionary society, as Stainback and Stainback (1990, p. 44) emphasize, it is necessary to end practices that exclude our students and offer them in an equal manner teaching in the regular education network is satisfactory, since, in an environment that provides curricular adjustments, that is stimulating and with activities that are appropriate, they will enrich possibilities for an inclusive stance promoting learning for all students.

This article will deal with pedagogical strategies for students with low vision and is divided into three moments, namely: first we will conceptualize low vision, then we will present which legal mechanisms guarantee inclusion for students with disabilities and later we will discuss which pedagogical strategies can be used to work with students with low vision.

2 Research methodology

The approach that underpins this research is qualitative, as we agree withChizzotti (2009, p. 79) when he advises on the need to interpret the phenomenon to make sense of the references that were collected during the research, since Minayo (2012) clarifies that:

> Qualitative research answers very particular questions. In Social Sciences, it deals with a level and reality that cannot or should not be quantified. In other words, it works with the universe of meanings, motives, aspirations, beliefs, values and attitudes (MINAYO, 2012, p. 21).

We carried out a bibliographical survey on theorists that supported this research, in this specifically we used in the body of the text: Domingues; Oak; Arruda (2010), Lima (2006), Romagnolli; Ross (2008), Sá; Fields; Silva (2007), Orrico; Canejo; Fogli (2013), Aranha (2006) and Machado (2009), and according to Marconi and Lakatos (2003) this type of research:

> [...] covers all bibliography already made public in relation to the topic of study, from separate publications, bulletins, newspapers, magazines, books, research, monographs, theses, cartographic material, etc. [...] its purpose is to put the researcher in direct contact with everything that has been written, said or filmed about a given subject [...]. (2003, p. 183).

Documentary research was also carried out, and onthis type of research Ludke and André state that:

> Documents constitute a powerful source from which evidence can be drawn that substantiates the researcher's claims. They also represent a “natural” source of information. They are not just a source of contextualized information, but they arise in a context and provide information about it (1986, p.39).

We consider pertinent the need for legal apparatuses such as: Federal Constitution, Statute of Children and Adolescents (ECA), World Declaration on Education for All, Salamanca Declaration, Law of Guidelines and Bases of Education (LDB), Universal Declaration of Human Rights , National Education Council (CNE), Plan of Goals Commitment to All for Education, National Education Plan (PNE), Statute of people with disabilities and the Large and Small Adaptation Booklet made available by the Ministry of Education (MEC), on this type of research Gil (2008, p. 153) complements by stating that there are advantages to using documentary sources such as, firstly, in moving past and present knowledge and being able to reflect on this data, secondly, investigating allows alternatives to understand cultural and social changes occurred over time, thirdly that this type of research does not require costs to develop and fourthly that through this research it is possible to obtain the data that is sought.

These techniques were fundamental to accumulate theoretical bases to support our study and interpret the phenomenon, given the demand evident in school institutions for students with disabilities who require adjustments and adaptations that are based on an inclusive perspective.

3 Theoretical framework

3.1 Conceptualizing low vision

When a child is young, it is difficult to tell if they have low vision, as at this stage the objects they handle have contrasting and bright colors, books are larger in size and the use of near vision is what predominates.

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at this stage (DOMINGUES; CARVALHO; ARRUDA, 2010, p.9), however Lima (2006, p. 75) states that several visual problems can be prevented or corrected until the schooling phase by carrying out an examination at the ophthalmologist through of a visual acuity test so that the child tries to identify letters and numbers from a distance of six meters to prevent or correct retinal organs. Furthermore, the author emphasizes that in everyday school life, teachers can be observing and identifying possible signs in students , as well as: redness in the eyes, conjunctivitis, tearing, stye, constant headaches or difficulty reading, among others.

Domingues; Oak; Arruda (2010, p. 9) also presents us with other characteristics and attitudes that can be noticed, not only by teachers, but by parents in everyday family life to be aware, such as:

> Red eyes, watering during or after eye strain, continuous blinking, double and blurred vision, constant eye movement (nystagmus);
> Difficulty seeing the blackboard, bringing the eyes too close to see figures or objects and reading or writing texts;
> Sensitivity to light, headaches, dizziness, nausea;
> Getting too close to watch television, tripping or bumping into people or objects, being excessively cautious when walking, avoiding playing or playing outdoor games, distracting attention.

Any other difficulties can also be observed in the classroom, as this is one of the environments in which children spend most of their time after home, so teachers may be observing when students are copying. of the board, whether when the student takes a long time to transcribe or always has difficulty finishing the tasks, when he gets too close to his school material, squinting to read and even when he is unable to follow the lines in the notebook while copying and if the teacher recognize any of these situations, he should talk to the child's parents to refer him to an ophthalmologist to find out how the student's vision is working so that he can return to class comfortably and with the necessary resources assisted if necessary.

One of the factors that limits the interaction of students with low vision is the factor of insecurity due to the overprotection of parents, since our physical spaces were built for visual standards, and in addition to distorted vision, this insecurity affects students' learning, damaging their motor, cognitive and social development. Under these conditions, it is important to encourage our students both at school and at home, because as Lima (2006, p. 95) tells us, the lack of encouragement and stimulation causes our students difficulties in acquiring their body schema, as well as in their understanding of concepts. spatial and environmental, that is, only through interaction between the environment that they will be able to develop their motor coordination and balance to move autonomously and safely in any space. The causes of low vision are caused by several factors, so it is essential that we understand these changes that Domingues; Oak; Arruda (2010, p. 8) explains that “some of the diseases that cause low vision are: retinopathy of prematurity, macular retinochoroiditis due to toxoplasmosis, albinism, congenital cataracts, retinitis pigmentosa, optic atrophy and glaucoma” , and all these dysfunctions have different changes and are classified by the Ministry of Health through Ordinance No. 3,128 of 2008 (BRASIL, 2008, p. 17) which presents the ICD10 classification codes for visual impairment:

> H54.0 Blindness, both eyes - Visual impairment classes 3, 4 and 5 in both eyes.
>
> H54.1 Blindness in one eye and low vision in the other - Visual impairment classes 3, 4 and 5 in one eye, with categories 1 or 2 in the other eye.
> H54.2 Low vision in both eyes - Visual impairment classes 1 or 2 in both eyes.
>
> H54.3 Unqualified loss of vision in both eyes - Visual impairment classes 9 in both eyes.
> H54.4 Blindness in one eye - Visual impairment classes 3, 4 or 5 in one eye [normal vision in the other eye].
> H54.5 Low vision in one eye - Vision impairment classes 1 or 2 in one eye [normal vision in the other eye].
> H54.6 Unqualified loss of vision in one eye - Visual impairment class 9 in one eye [normal vision in the other eye]
> H54.7 Unspecified loss of vision - Visual impairment class 9.

To synthesize these various visual situations Romagnolli; Ross (2008, p. 23) presents us with some images in an attempt

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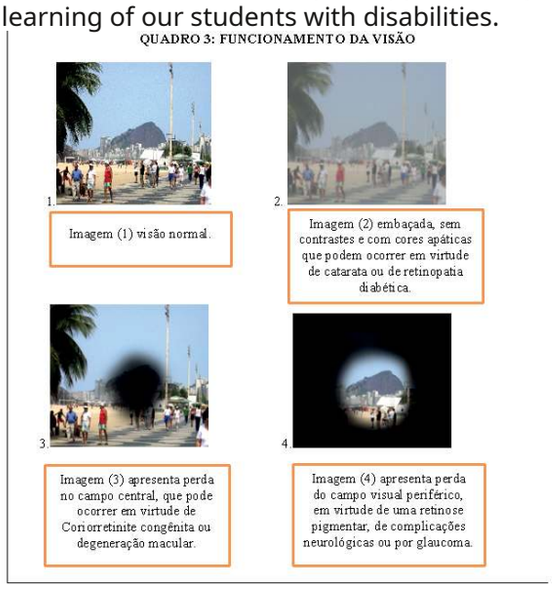
to clarify for those who do not work in the health sector, how vision works in different circumstances. However, it is worth highlighting that although this information presented so far is essentially clinical, it is not our objective to focus solely on these definitions and treat them as more relevant, but they are necessary, as it is from them that we can plan appropriately using specialized tools. pedagogical approach to the teaching and learning of our students with disabilities.

QUADRO 3: FUNCIONAMENTO DA VISÃO



Source: Romagnolli; Ross (2008, p. 23) adapted by the author.

As we can see, there is a range of visual changes that need to be known in advance, so that SRM teachers and regular classroom teachers can develop the best strategies according to the students' needs. From the moment that teachers observe their students more closely, they will be able to develop work that meets their potential and encourages them through methodological resources and materials adapted to overcome their difficulties, because according to Sá; Fields; Silva (2007, p. 13) we need to discover and reinvent outdated methods that do not match the specific needs of our students.

3.2 Legal mechanisms that guarantee inclusion

We will cover the period from the 1990s to the present day as we demonstrate that from this period onwards there have been greater efforts towards an inclusive ideology in the Brazilian context. It is clear that the inclusion movement has become athematicquite present in our schools, it is configured as a paradigm that seeks to transform traditional practice towards a curricular, pedagogical, structural and cultural reorganization of our institutions.

It was through the Federal Constitution of 1988 that the process of universalization of education was promoted, with the fundamental objective in its article 3, item IV "to promote the good of all, without prejudice based on origin, race, sex, color, age and any other forms of discrimination" in article 206, section I establishes that education must promote "equal conditions for access and permanence at school" and in article 208, section III presents the State's duty to guarantee the provision of "specialized educational assistance which will preferably take place in the regular education network"(BRAZIL, 1988).

The Child and Adolescent Statute (ECA) in law no. 8,069 of 1990 recommends that AEE for children with disabilities should be given preferably in regular education, guaranteeing priority in protection and prevention for students and families and determines that "parents and or guardians have the obligation to enroll their children or pupils in the regular education network". Documents such as the World Declaration on Education for All (1990), which in its 3rd article tells us about universal access to education and promoting equity, show us that "Basic education must be provided to all children, young people and adults. To this end, it is necessary to universalize it and improve its quality, as well as taking effective measures to reduce inequalities" (BRASIL,1990. p. 4)and the Salamanca Declaration (1994) began to guide public policies in relation to school inclusion.The Salamanca Declaration (1994) points out that:

> The fundamental principle of an inclusive school is that all children should learn together, whenever possible, regardless of any difficulties or differences they may have. Inclusive schools must recognize and respond to the diverse needs of their students, accommodating both learning styles and paces and ensuring a quality education for all through an appropriate curriculum, organizational arrangements, teaching strategies, use of resources and community partnerships. .

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Based on these principles, school inclusion has become a matter of right also guaranteed by the Law of Guidelines and Bases of National Education (LDB - Law no. 9,934/96) which in its article 4, section III determines that "specialized educational assistance is free to students with disabilities, pervasive developmental disorders and high abilities or giftedness and preferably in the regular education network" and in article 59, item I, ensures for students with disabilities that the education system can promote "curricula, methods , techniques, educational resources and specific organization to meet their needs" (BRASIL, 2010) another document is Art. 7 of the Universal Declaration of Human Rights which: "Everyone is equal before the law and has the right, without any distinction, to equal protection of the law. Everyone is entitled to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination" (1948, p. 6).

The National Education Council (CNE) of the Basic Education Chamber (CEB) established the National Guidelines for Special Education in Basic Education (DNEE-EB) which in its article 2 of CNE/CEB no. 2/2001 presents us that :

> Education systems must enroll all students, and schools are responsible for organizing themselves to serve students with special educational needs, ensuring the necessary conditions for quality education for all (MEC/SEESP, 2001).

In addition to defining that the school needs to adapt to receive students and provide support in relation to AEE, in its 1st article it also tells us that this service "will begin in early childhood education, in daycare centers and preschools [...] ", however in article 3 it defines that "[...] in some cases, replace common educational services, in order to guarantee school education and promote the development of the potential of students who have special educational needs, in all stages and modalities of basic education", in this article it does not favor the inclusion process, as it gives the possibility of replacing regular education with AEE, which contradicts the 2nd article of this resolution, as it does not increase inclusive actions as established to be offered in schools (MEC/SEESP, 2001).

In 2001, decree no. 3,956promulgates the Inter-American Convention on the Elimination of All Forms of Discrimination against Persons with Disabilities stating that people with disabilities have the same rights and freedoms as all other people, and that they should not be subjected to any type of exclusion or discrimination due to their disability, as equality and dignity are essential to every human being (BRASIL, 2001), thus fighting for any type of distinction or separation of those historically excluded.

In 2002, CNE/CP Resolution No. 1, of February 18, 2002, establishes National Curricular Guidelines for the Training of Basic Education Teachers, at higher level, degree course, full degree, and defines us in its article 6° , paragraph 3 in section II that it is necessary to promote through a curriculum training that considers diversity, opening space to enable debates that include issues that involve knowledge about the specificities of students with disabilities (BRASIL, 2002).

In 2004, the Federal Public Ministry launched the document "Access of students with disabilities to schools and common classes in the regular network", which aimed to "disclose the most current concepts and appropriate to global guidelines for the inclusion of people with disabilities in the educational area [...]" (BRASIL, 2004), ratifying the contribution of schooling as a right for all students without distinction.

Decree No. 5,296 promulgated in 2004 brought us general standards and criteria to guarantee accessibility for people with physical disabilities or reduced mobility, addressing adjustments in relation to architectural and urban design, conceptualizing in its 8th article accessibility as a "condition for the use, with safety and autonomy, total or assisted, of spaces, furniture and urban equipment, buildings, transport services and devices, systems and means of communication and information, by a person with a disability or with reduced mobility" (BRAZIL, 2004).

In 2005, the Ministry of Education prepared a guiding document called Inclusive Education Program: right to diversity, in which its main objective is to "disseminate the policy for building inclusive educational systems and support the process of implementation and consolidation of the Inclusive Education Program: Right to Diversity in Brazilian municipalities" (BRASIL, 2005) this document intends, through the formation of the school community as a whole, to guarantee the right to schooling for students, in addition, it tells us about the provision of SEM for AEE, informing us that:

> The Inclusive Education Program: Right to Diversity will make available, to the hub municipalities and state education departments, equipment, furniture and teaching materials, for the implementation of multifunctional resource rooms intended for specialized educational services, with a view to supporting the process of educational inclusion of students with special educational needs in the public education system. (BRASIL, 2005, p. 9).

In 2006, Brazil ratified the Convention on the Rights of Persons with Disabilities, adopted by the United Nations (UN), a document that is equivalent to a constitutional amendment, establishing in its article 24, item II that States must ensure that disability is not a type of allegation for exclusion from the "primary and compulsory or secondary education" educational system and that students with disabilities may have

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access to free, quality education under equal conditions for other people (BRASIL, 2012). The decreeNo. 6,094, dated April 24, 2007, established theimplementation of the All Commitment to Education Goals Plan, which in its 2nd article, section IX, provides that regular schools can "guarantee access and permanence of people with special educational needs in common classes of regular education, strengthening educational inclusion in public schools " (BRASIL, 2007) thus strengthening the inclusion process. In 2014, the National Education Plan (PNE) was approved and sanctioned and in goal four it presents the guarantee of inclusion in education systems. According to this PNE goal, it is necessary:

> Universalize, for the population aged four to seventeen years old with disabilities, global developmental disorders and high abilities or giftedness, access to basic education and specialized educational assistance, preferably in the regular education network, with the guarantee of an inclusive educational system, of multifunctional resource rooms, classes, schools or specialized services, public or affiliated.

Among goal four of this PNE, nineteen strategies are foreseen, together they provide significant support as progress towards school inclusion, as they address the implementation of SRM among their goals; emphasize continuing training for teachers who carry out the AEE; promote accessibility, didactic adequacy and assistive technologies for students with disabilities; ensure availability for bilingual education in the Brazilian Sign Language (LIBRAS) as the first language and written Portuguese as the second language in accordance with Decree No. 5.62/2005 in its article 22, among other strategies that are developed to ensure the inclusion of students .

In 2015, the Brazilian Law for the Inclusion of Persons with Disabilities (Statute of Persons with Disabilities) was established, sanctioned through Law No. 13,146, which in its article 28 provides for the improvement of education systems, with the aim of guaranteeing conditions for access and permanence, eliminating obstacles, fully including students with disabilities and stating that it is the public authorities' duty to not only guarantee access to specialized educational services, as well as guarantee access to the curriculum under equal conditions (BRAZIL, 2015). In this same statute, it is also possible to observe in chapter IV, which pronounces on the right to education in article 27, provides that:

> Education is the right of people with disabilities, ensuring an inclusive educational system at all levels and lifelong learning, in order to achieve the maximum possible development of their physical, sensory, intellectual and social talents and abilities, according to their characteristics , interests and learning needs.
> Single paragraph. It is the duty of the State, the family, the school community and society to ensure quality education for people with disabilities, keeping them safe from all forms of violence, neglect and discrimination (BRASIL, 2015, p. 32).

And it also provides in its article 28 that it is ensured through the public power to be in charge of "creating, developing, implement, encourage, monitor, evaluate the inclusive system in schools at all levels and modalities", in addition, this article also presents us with the XXIII sections that provide that educational systems need to guarantee the conditions for access and permanence of students with disabilities (BRASIL, 2015, p. 32-33).

Specifically for students with low vision, the legislation presents us as one of the documents the National Curricular Parameters – Curricular Adaptations (SEF/SEESP, 1998) which bring us educational strategies aimed at students with disabilities in the topic that deals with visual impairment gives us the concepts of blindness/low vision, tells us about the school curriculum that needs to be built through the schools' Pedagogical Political Project, guiding the activities, their execution and their purposes, it also presents us with the curricular adaptations that need to be made, in addition, gives us suggestions for resources that can be used for students with low vision, and presents the methodological variables that contribute to adaptations to access the regular classroom curriculum.

Another cool device are the Large and Small Adaptations Booklets developed by theEscola Viva Project - Ensuring access and permanence for all students at school. Major Adaptations considered "significant adaptations" are actions of higher political-administrative competence, as they involve physical administrative and financial modifications. According to the booklet, adaptations to access the curriculum are:

- The creation of physical, environmental and material conditions for the student, in their school unit;
- Adapting the physical school environment;
- The acquisition of the necessary specific furniture;
- The acquisition of specific equipment and material resources;
- The adaptation of materials for common use in the classroom;
- The continued training of teachers and other education professionals;
- The implementation of actions that guarantee interdisciplinarity and trans-sectorality.

(BRAZIL, 2000, p.14).

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Furthermore, it guides us through changes in spatial orientation in schools, in order to facilitate mobility issues in an attempt to avoid accidents for students with low vision or blindness, it also talks about the acquisition of equipment or instruments that contribute to writing and communication. to promote learning.

In the Booklet that deals with Small Adaptations considered "non-significant adaptations", as they are changes in the curriculum that are the responsibility of the teacher in the regular classroom so that they can contribute and promote access for students with disabilities, it also presents us with some guidance on students with disabilities. low vision, in addition to showing the categories in relation to the adaptation of objectives; of the contents; teaching methods and didactic organization, assessment and temporality.

We have noticed significant advances in relation to the inclusion process for students with disabilities, maintaining some principles since the nineties until today. However, it is urgent that, together with these advances, a social and school restructuring is carried out in practice to guarantee the inclusion of these students in schools guaranteeing them their rights.

3.3 Pedagogical strategies for students with low vision

The second optical resources are instruments such as: manual or support magnifying glasses, telescopes and bifocal glasses that promote the magnification of objects and images that favor better visualization for students with low vision (DOMINGUES; CARVALHO; ARRUDA, 2010, p. 11-12), and for students to use it appropriately, considering their real visual needs, it is necessary to have a prescription from an ophthalmologist who will allow the size and degree to be prescribed through a functional assessment in addition to the guidance of the AEE teacher who will explain the importance of using these instruments in your daily life.

Non-optical resources are environmental modifications, in relation to furniture, expansions in teaching materials for reading and writing, lighting, that is, adaptations that complement optical resources, such as: adequate lighting in environments with the use of lamps, enlarged guidelines in the notebook with contrasting strong colors such as red and black, enlarged texts, pens with thick tips, use of 6B pencils and an inclined board on the student's desk for better visualization for reading and writing. (DOMINGUES; CARVALHO; ARRUDA 2010, p. 12).

Given that low vision compromises central or peripheral vision, generating great visual sensitivity depending on the lighting and its position in the environment, it is essential to stimulate the visual residue, but the environment must be organized in a visually comfortable way, for this they can different materials and resources can be used. Initially we have to maintain control over the lighting, adapting it to the student's preference, as solar reflection or artificial light that can fall on the board must be avoided. Furthermore, while the teacher writes on the board he can read it out loud, also when copying on the board. It is important to use strong colors in the pilots such as red or black and when the teacher uses other resources such as slides, videos, maps or figures he needs to describe or expand. We can also improve contrast by creating enlarged lines in notebooks with black or red markers, as well as offering the student to use pencils or pens with thick tips to copy that differ from the color used to make the lines in their notebook, as students with low vision are normally unable to read what they write and to facilitate the handling of school accessories that are routinely used, it is necessary to mark them with some type of relief for better viewing.

Another valuable tool for visual stimulation is magnification, however for this to be carried out it is necessary to take into account the size of the letter, the type of letter and the spacing, and to improve the positioning and adequate posture when reading and reading. writing requires the use of a table higher than conventional ones, along with an inclined board that contributes significantly to the performance of school activities. (DOMINGUES; CARVALHO; ARRUDA, 2010, p. 13-14).

Furthermore, the use of software and assistive technologies has enhanced teaching for all students with disabilities, as the computer is a technology that allows for more autonomy, as students will be able to enlarge texts according to their needs, improving contrast, editing texts via audio, listening to texts with ease and convenience to carry out tasks, among many, the most used software to assist students with low vision are: Dosvox, Virtual Vision and Jaws, as Lima (2006, p. 93) tells us:

> The education of people with visual impairments requires some specific resources that enable their access to the cultural and scientific world. These resources can be associated with education that takes place in regular schools, and involve everything from everyday aspects of interpersonal relationships to the use of computers as an indispensable tool.

It is pertinent to highlight here that approaching the screen and making an effort to see what is written does not harm the vision, what may occur is tiredness or fatigue, however this stimulation of visual residue is extremely important for students to

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with low vision enhance their visual residue. It is worth mentioning that teachers need to consult their own students, taking into account the different ways of seeing to choose the most appropriate materials so that together they can think about what adjustments need to be made (ORRICO; CANEJO; FOGLI, 2013, p. 135). According to Aranha (2006, p.30) some pedagogical strategies can be used to develop activities for students with low vision, among them are:

- Carefully analyze visual field changes, which may be different in each eye.

- Help the student understand and seek the best position for visual work.
- Help the student identify the best magnification equipment, manual, glass, table or illuminated magnifying glasses. Adapting these aids is often difficult due to light reflection and glare.
- Understand that due to visual field changes, enlarged material does not always facilitate discrimination and reading.
- Use a text holder for greater reading comfort.

Machado (2009, p. 123-124) also presents us with other guidelines and highlights that depending on the visual situation, some activities that are normally aimed at teaching blind students can be used in teaching students with low vision, among them is initiation into teaching the Braille system, as well as orientation and mobility techniques, teaching activities of daily living (ADL) and the use of specific information and communication technologies (ICTs), as these resources promote the development of significant skills. We emphasize here the importance of visual stimulation for students with low vision, and that although these activities are normally aimed at blind students, they can also contribute to the work with students who have a high level of impairment, and because of this it is necessary to use of some of these activities to enhance pedagogical work.

Therefore, we need to look for innovative and timely alternatives to appropriately promote the teaching and learning of our students, just as Lima (2006, p. 122-123) reinforces that it is essential that teachers can plan and intervene in an attempt to adequately subsidize conditions for the development of all students, for this it is necessary to know in advance about the subjects present in our class and attend the SRM more regularly to identify and use materials adapted for pedagogical work in the regular classroom.

Final considerations

Based on the scores evidenced in this work, we reiterate the importance of ensuring adaptations with a view to teaching that enhances our students with disabilities, despite seeing several advances in the context of school inclusion, however, we still observe gaps in what is predicted and in what is offered, and this reality needs to be changed, since it is necessary to look for alternatives to remove structural and attitudinal obstacles, a cultural change is urgent not only in thinking, but in attitude, respecting, tolerating and prioritizing recognition and appreciation of different cultures through educational practices that include the construction of a flexible and adapted curriculum, respecting all students without distinction.

In this sense, it is also important to highlight that the initial and continuing training of teachers is associated with an inclusive perspective, as they are the ones who are in regular classrooms on a daily basis and need to have conditions in their training to work with students with disabilities, or have possibilities to have continued training to be able to develop objectives, which, in line with SRM teachers, will be able to articulate and think about plans and actions in an attempt to contribute to the specific needs of each student, since Sanches and Teodoro (2006, p. 74) tell us that "for inclusive education to be a reality, in addition to a change of mentality, with regard to access and success in education for all, it is necessary to create conditions and resources appropriate to each situation". In other words, attitudinal, structural, environmental changes and, mainly, cultural values so that the right to quality and adequate education is realized.

Furthermore, the participation of this teacher during meetings or class councils is essential, as in these spaces he must guide families and teachers in the regular classroom, alerting them to the use of resources and materials essential for students with disabilities and also carry out coordination between teachers in the regular classroom, so that they can work in a cooperative and articulated way, joining forces together with the management and the school community so that together they can collectively design a curriculum and a school that contemplates an inclusive perspective, as a cordial relationship is necessary between regular classroom and SRM teachers, as the exchange of knowledge involving different environments and materials enriches possibilities for work that enhances the student and at the same time respects their singularities.

In other words, from the moment there is a restructuring of the education system so that students with disabilities

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can enjoy the same rights as other students, ceasing to see them as problems in the classroom, but providing opportunities for situations that can promote to all students the possibility of involvement and joint participation in different situations, will contribute to moral values such as respect and tolerance can be perceived in the school context in an attempt to change our culture that still seems stagnant.

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