

**34 - CASE STUDY: PHYSICAL EDUCATION PRACTICE BY STUDENTS WITH LOW VISION**

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**INTRODUCTION**

Law No. 9394/96 (BRAZIL, 1996), the Law on the Guidelines and Bases of National Education, regulates school education by establishing that education is the right of everyone and the duty of the family and the State, it has as its basic principles, equality conditions for access and stay in school and inclusion.

Second Carneiro (1998, p. 36):

The plural reality of the students must find, in the classroom, adequate space for learning the coexistence between different ones. This is the best understanding of the concept of equity contained in the Federal Constitution: everyone is equal before the law ... it is the foundation of a single school for all, including those students with some kind of disability. (CARNEIRO, 1998, p.36)

For SANTOS (2003) inclusion is considered a process that is not restricted to the insertion of disabled people in the educational system. In which the term include involves, in addition to physical coexistence, the development of cultures, policies and practices that break barriers imposed on learning and contribute to the increase of students' participation in different areas of their lives.

Thus, he observes the importance and necessity of respecting and attending to individual differences, as CARVALHO (SEED / DEE, 2006, p.6) states:

We have adopted as one of the references the conception that educational inclusion is more than physical presence, it is much more than architectural accessibility, it is much more than enrolling students with disabilities in the regular classroom, it is much more than a movement of special education, because it imposes itself as a responsible movement that can not give up a network of help and support to educators, students and family members. (CARVALHO, 2006)

Thus, this study brings aspects related to the inclusion of students with low vision, from a Public School in the Municipality of Estância Velha / RS. The study focuses on the participation of this student in Physical Education classes, because in this curricular discipline there are few studies associating the student with low vision and the practice of some sport.

I emphasize that vision is a sense of great importance in human development, for through it we experience and acquire knowledge about the world around us.

The education of the visually impaired child should consider some factors that may have influence, such as: the stage of life in which the disability arose, the time elapsed since the loss, how the problem occurred, gradually or suddenly.

The person with visual impairment may be blind or have poor vision. If the deficiency reaches a single eye, visual impairment is not characterized. Low vision is the significant change in vision functional capacity, due to isolated or associated factors, such as: low visual acuity, significant visual field reduction, changes in color vision, and sensitivity to contrasts that interfere with or limit performance visual.

The educational process of the student with low vision will be developed mainly by visual means, although with the use of specific aids.

Because vision is such an important channel of learning, urgent steps must be taken so that the child can make the most of his or her vision and use the other senses, touch, hearing, smell and taste and the whole body, in understanding the world. Low vision can restrict the child's developmental and learning process when the environment is not favorable, that is, when the specific needs arising from visual changes are not addressed as early as possible in the family, school and community environment.

**LOW VISION - CONCEPTUALASPECTS**

The World Health Organization (WHO) deems the person who is deprived to be partially sighted (according to pre-established criteria) or totally unable to see. Low vision (or low vision) is impairment of visual functioning in both eyes, even after correction of common refractive errors with wearing glasses, contact lenses, or ophthalmologic surgeries. This is a technical and quantitative definition. Low vision is for anyone who has a visual acuity less than 0.3 (Snellen), up to light perception or, a visual field less than 10 degrees from the fixation point. The main indications related to visual impairment are: constant eye irritation, excessive approximation to the face to read or write, difficulty reading at distance, visual effort, head tilt to try to see better, difficulty seeing small obstacles on the floor, (eye constantly trembling), strabismus or difficulty seeing in clear environments. We can say that Low Vision is an intermediate situation between normal vision and blindness, in which a person with the best conventional optical correction, or after surgical treatment, presents difficulties in performing one or several daily tasks, such as writing, reading, moving on the street, watch television, cooking, among others.

The World Health Organization (WHO) has established the following measures to quantitatively define the concept of Low Vision: Visual Acuity (AV) equal to or less than 3/10 and / or Visual Field (CV) less than 20°.

The main causes of visual impairment are: loss of vision due to injuries, trauma, perforations and eye leaks. During gestation, diseases such as rubella, toxoplasmosis and syphilis can cause disability in the child. Infections in newborns can also cause visual deficits.

Other diseases that occur, most often in adults, can cause visual impairment if not treated properly. Among the main ones are: glaucoma, diabetes, toxoplasmosis, retinal detachment, congenital cataract, retinopathy of prematurity, low brain oxygenation (hypoxia), among others. Doctors with subnormal vision estimate that cases of visual impairment could be reduced by up to 30% if all preventive and efficient measures in the areas of education and health were adopted.

The WHO advocates functional vision assessment by an experienced education / rehabilitation practitioner in order to see if the individual is using their vision normally.

For CARVALHO et al. (1994, p.14-17) many visual functions may be involved in the person with low vision: visual acuity, visual field, adaptation to light and dark and color perception, depending on the type of pathology, ie, of the type of ocular

structure that presents lesion.

Thus, the individual may be potentially able to use the vision for the planning and execution of tasks.

The educational work can promote a social insertion of the visually impaired individual, whether in the home or professional environment. However, it should have the proper accompaniment of specialized professionals to acquire better spatial orientation, to know if to feed properly, use of optical aids (like special loupes, flares, etc.). However, for each case and problem there is a specific approach.

#### OBJECTIVE OF THE STUDY

To devise strategies that allow the inclusion of students with low vision in physical education classes, favoring integration and sports practice, aiming at the exercise of their motor potentialities. **METHODOLOGY** The case study has been chosen, on a recurring basis, as an alternative for research on the educational phenomenon. Thus, in the act of constructing and delineating this research, a case study is defined within the qualitative paradigm, since according to FREIRE (2000) it is necessary to move from a technical vision to another that incorporates the cognitive and socio-cultural affective dimensions of Physical Education. The reactions and practices of a female student of 14 years of age in physical education classes were analyzed and her reactions regarding sports practice were analyzed, and the resources and didactic-pedagogical relationship with sports initiation were observed, since low vision reduces some of their motor skills.

#### DISCUSSION OF RESULTS

The student is 14 years old and is a student of the 8th year of E.M.E.F. Anita Garibaldi in the municipality of Estância Velha, RS. During the academic year 2016 teachers noticed a difficulty of the student mentioned in reading and jotting down the information on the board and even allocating it to the front of the room she still had difficulty participating and interacting in class.

During the evaluation of the second quarter of 2016 the family was contacted because the teaching group felt the need for a diagnosis of an ophthalmologist since the measures adopted in the classroom did not have the desired effect, in addition to the student complaining of a lot of headache, especially at the end of class.

Since she was a student from a family with limited resources, they used the Unified Health System (SUS) of the municipality and she did the exams in early November and had glasses at the end of that month, since she was diagnosed with severe myopia. Severe myopia is a pathology that is gradually hampering vision, where the student falls in the intermediate level between 1 and 2 according to the WHO, World Health Organization.

As we were at the end of the school year it was not possible to keep up with its development, but the headache crises ceased.

The beginning of the 2017 school year was no different than any other year, however, as a Physical Education teacher, I was curious about the real condition of the student, since during the previous year in Physical Education classes she did not participate in all activities since I had a headache, so I had to create strategies for her to participate in the activities when I was in class.

Already in the first classes it was possible to notice the improvement of the student, since she was more solicited and safe, participating in almost all the activities proposed only avoiding games of contact. We developed strategies of action for the classes with the student, during the explanations of the classes and practical activities she gets her glasses, but during practical activities and especially games in small spaces she found it better to do them without glasses due to the value of the same, after we discovered that it was a family orientation.

For the year 2017, the student was assigned to a class with a few students, with 22 students and we take into account that most of the students in the class already knew each other, thus maintaining an affinity, keeping it comfortable with all the same. She studies in the afternoon shift where there are fewer students at school, but this was a coincidence since in the afternoon she is responsible for bringing her younger siblings who are studying in the 6th year and the brothers who are twins have the responsibility of on rainy days read the sign, itinerary, the bus for them to go home, already on sunny days they move on foot, because she could only read the words when they are very close.

The strategies already mentioned had an effect, such as the use of colored balls for the practical activities, since the monochromatic ones: mainly those of volleyball and basketball she had greater difficulty to visualize the ball, as the gymnasium houses two multisports courts, where I can best divide the group and mainly allows me to divide them into groups in can perform mini games. In these mini practices it was possible to note that the student due to the low vision does not seem to negatively influence the stability in orthostatic posture, besides the speed of its postural adjustment, without damaging the body balance.

The low vision does not yet appear to influence the radial displacement, but it is careful with its displacement causing a low speed, thus not interfering in the maintenance of its equilibrium. I emphasize that she does not fail to carry out any proposed activities, but realizes them in her rhythm and I always try to respect her as well as the class in which she is inserted.

#### CONCLUSION

For the inclusion of the student with low vision in the regular classroom, adaptations are necessary that favor participation conditions, facilitate learning and improve their academic performance. The main ones are: the positioning in the classroom, adaptation of materials and the practice in small spaces, always respecting the rhythm of all the parties involved in the process.

Inclusion is not consolidated by laws. It can be seen as a process that goes beyond pedagogical issues because it involves cultural spheres associated with values that make up intra-school and school relationships with the surrounding community.

Thus, inclusion is built in a dialogical relationship, in the evaluation and elaboration of strategies and I believe that new educational expectations may arise in the daily life, where there is a space that allows those involved to discuss ways to achieve it.

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#### CASE STUDY: PHYSICAL EDUCATION PRACTICE BY STUDENTS WITH LOW VISION

**SUMMARY:** Vision is a sense of great importance in human development, for through it we experience and acquire knowledge about the world around us. In this way, this study brings aspects related to the inclusion of low vision student, from a Public School in the Municipality of Estância Velha / RS. The study focuses on the participation of this student in Physical Education classes, because in this curricular discipline there are few studies associating the student with low vision and the practice of some sport. Low vision is the significant change in vision functional capacity, due to isolated or associated factors, such as: low visual acuity, significant visual field reduction, changes in color vision, and sensitivity to contrasts that interfere with or limit performance visual. For this research, we opt for the case study, with the objective of outlining strategies that allow the inclusion of students with low vision in physical education classes, favoring integration and sports practice, aiming at the exercise of their motor potentialities. With this research it is concluded that the educational process of the student with low vision will be developed mainly by visual means, although with the use of specific aids and pedagogical and resource modifications, and practices in small spaces.

**KEY WORDS:** low vision, inclusion, physical education.

#### ESTUDIO DE CASO: LA PRÁCTICA DE EDUCACIÓN FÍSICA POR ALUMNA CON BAJA VISIÓN

**RESUMEN:** La visión es un sentido de gran importancia en el desarrollo humano, pues a través de ella vivimos y adquirimos los conocimientos acerca del mundo que nos rodea. De esta forma, este estudio trae aspectos referentes a la inclusión de alumna con baja visión, de una Escuela pública en el Municipio de Estancia Vieja / RS. El estudio enfoca la participación de esta alumna en las clases de Educación Física, pues en esta disciplina curricular hay pocos estudios asociando al alumno con baja visión y la práctica de algún deporte. La baja visión es la alteración significativa de la capacidad funcional de la visión, debido a factores aislados o asociados, tales como: baja agudeza visual significativa, reducción importante del campo visual, cambios en la visión del color y la sensibilidad a los contrastes, que interfieren o limitan el rendimiento visual. Para esta investigación se opta por el estudio de caso, con el objetivo de trazar estrategias que propicien la inclusión de alumnos con baja visión en las clases de educación física, favoreciendo la integración y práctica deportiva, visando el ejercicio de sus potencialidades motoras. Con esta investigación se concluye que el proceso educativo del alumno con baja visión se desarrollará principalmente por medios visuales, aunque con utilización de ayudas específicas y modificaciones pedagógicas y de recursos, y prácticas en espacios reducidos.

**PALABRAS CLAVE:** baja visión, inclusión, educación física.

#### ÉTUDE DE CAS: PRATIQUE DE L'ÉDUCATION PHYSIQUE PAR DES ÉLÈVES À FAIBLE VISION

**RÉSUMÉ:** La vision est un sens d'une grande importance dans le développement humain, car à travers elle, nous expérimentons et acquérons des connaissances sur le monde qui nous entoure. De cette façon, cette étude apporte des aspects liés à l'inclusion de l'étudiant de basse vision, d'une école publique dans la municipalité d'Estância Velha / RS. L'étude porte sur la participation de cet élève aux cours d'éducation physique, car dans cette discipline, il y a peu d'études associant l'étudiant ayant une basse vision et la pratique d'un sport. La déficience visuelle est le changement important de la capacité fonctionnelle de la vision en raison de facteurs isolés ou associés tels que: faible acuité visuelle, réduction significative du champ visuel, modification de la vision des couleurs et sensibilité au contraste, qui interfèrent ou limitent les performances visuel. Pour cette recherche, nous optons pour l'étude de cas, avec l'objectif de définir des stratégies qui permettent l'inclusion d'élèves malvoyants dans les classes d'éducation physique, favorisant l'intégration et la pratique sportive, visant à l'exercice de leur potentiel moteur. Avec cette recherche, il est conclu que le processus éducatif de l'étudiant avec une basse vision sera développé principalement par des moyens visuels, bien qu'avec l'aide des aides spécifiques et des modifications pédagogiques et de ressource, et des pratiques dans de petits espaces.

**MOTS CLÉS:** basse vision, inclusion, éducation physique.

#### ESTUDO DE CASO: A PRÁTICA DE EDUCAÇÃO FÍSICA POR ALUNA COM BAIXA VISÃO

**RESUMO:** A visão é um sentido de grande importância no desenvolvimento humano, pois através dela vivenciamos e adquirimos os conhecimentos a respeito do mundo que nos cerca. Desta forma, este estudo traz aspectos referentes à inclusão de alumna com baixa visão, de uma Escola pública no Município de Estância Velha/RS. O estudo enfoca a participação desta alumna nas aulas de Educação Física, pois nesta disciplina curricular há poucos estudos associando o aluno com baixa visão e a prática de algum esporte. A baixa visão é a alteração significativa da capacidade funcional da visão, decorrente de fatores isolados ou associados, tais como: baixa acuidade visual significativa, redução importante do campo visual, alterações para visão de cores e sensibilidade aos contrastes, que interferem ou limitam o desempenho visual. Para esta pesquisa opta-se pelo estudo de caso, com o objetivo de traçar estratégias que propiciem a inclusão de alunos com baixa visão nas aulas de educação física, favorecendo a integração e prática desportiva, visando o exercício de suas potencialidades motoras. Com esta pesquisa conclui-se que o processo educativo do aluno com baixa visão se desenvolverá principalmente por meios visuais, ainda que com utilização de auxílios específicos e modificações pedagógicas e de recursos, e práticas em espaços reduzidos.

**PALAVRAS CHAVE:** baixa visão, inclusão, educação física.