# 60 - SCHOOL PHYSICAL EDUCATION - CHILD INCLUSION FACTOR WITH DOWN SYNDROME

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## INTRODUCTION

Down's syndrome is a genetic alteration that occurs during the formation of the baby, but precisely during the first 8 weeks of gestation, as by a genetic accident during cell division, there is a extra chromosome, i.e., instead of 46 chromosomes, a child with Down syndrome has 47 chromosomes.

Academically, Down syndrome was first described by the British physician John Langdon Down in 1866, since then several other studies have come to be realized. This syndrome occurs equally among boys and girls, and is considered one of the most common birth defects of the world's population.

> There is no specific reason for the occurrence of mutation: it is not the result of something the parents did or did not do. The extra chromosome may come in the father's sperm or the mother's egg, or may occur soon after conception. Women after 35 years appear to be sobremaneiras likely to have babies with Down. However, the father's age appears to have a similar effect. (O'REAGN, 2007, p.43)

With the universalization of regular school, children with disabilities and high ability / giftedness began to attend regular schools, thus arises the need to stimulate actions for the school inclusion.

Thus Physical Education, as a curricular component, appears as school inclusion factor because the celebrations and games children has a form of social interaction. Play is a basic form of social and cognitive learning.

According SOLER (2005), through play we can know and better understand a child, because she communicates very efficiently and shows us how to build your world. Thus, the game is to explore the world around, but also explore their own standards, rules and attitudes.

The game enhances some dimensions, such as: the language, through communication of thoughts and feelings; cognitive, giving access to more information; affective, child opportunity to express their feelings and emotions; the physical-motor, the interaction of motor, visual, tactile and auditory for the object of their environment; morality, by building rules creates a relationship of respect with adults and with other children.

> The game is a typical case of pipelines neglected by traditional school, given the fact seem devoid of functional significance. For current pedagogy is just a break or wear a surplus of energy, but this simplistic view does not explain either the importance that children attribute to their games, let alone steadily from that line the children's games, symbolism or Fiction, for example. (Piaget, 1985, p. 158)

## METHODOLOGY

> The case study allows us to unravel in depth the motivations, habits, ideas, plans, attitudes of a subject, the point where we can suggest explanatory and hypotheses about particular made or given personality. (Gaya, 2008: p.109)

This research deals with the case study of a carrier girl with Down syndrome, now 11 and a student of the 5th year of elementary school, the municipal Old resort, in Rio Grande do Sul

In the course of a month, they, along with her classmates were challenged to jump rope at the start of school, during the week the group had two periods of 50 minutes, totaling five weeks of intervention with 10 periods.

When we talk about science of human movement, we come across numerous peculiarities to do a case study, since during our classes we have to take into account the different situations, demands; without forgetting all the students in the class and their aspirations and especially its' motor baggage ", ie their Body Culture.

According to Gaya (2008), the case study is guided by the need for deeper understanding of a singular reality, be it an individual, a group, a social institution or a community.

It is fair to conduct a case study in a class during physical education classes.

All 10 interventions were performed within the physical education classes with the whole class (22 students), where the class as a whole had to jump rope, bruised by the teacher. Activities with string preceded the others, ie, a relaxed heating consisting of litanies and chants (litanies) which also served as the icebreaker, because we were at the beginning of the school year and some students still did not know.

At the time the student was jumping, he could choose which song (litany) would be sung by the crowd, or simply would count how many jumps have.

During 2014, in physical education classes, that student that realized the approach was the focus of a research that involved the psychomotor skills in the learning process in children with Down syndrome, in class and on the playground noticed their interest in activities with rope, but she tried not to jump; She sang, counted, cheered by colleagues, but did not feel safe to try to jump, with the end of the year there was no time for interventions and our goal was his language acquisition, but already have stipulated the target for the year 2015.

At the beginning of the year as planned lessons, I tried to start the activities with string (heating), but it was still unsafe, so I had to create alternatives so she jumped at this point was primordial class participation.

First, it provides the largest number of songs that we knew, which took account of the songs and litanies they knew in their homes (physical culture), but she continued to sing and tell, but refusing to jump. The second time, she was going to the rope, but was not able to jump over two leaps, this time she started jumping in pairs, facing each other holding hands, but she was

dependent on the colleague that was in hand, ie she hoped the fellow jump after jump, the third time she continued to jump double without the hand at this time was in the second week she was performing 4-5 jumps.

From the third week, more precisely in 5th class she started jumping alone, alternating between 5:07 leaps, but having a hard time getting the jump (notion timeline).

In the fourth week, I began to want to try to jump more times per class, at this point I sought to create a routine that would give security to her, marking a place to skip taking advantage of the lines of a sports field this routine also earned for the whole class as the conversation fumbled his action at that time found that she liked to tell the jumps and not cantassem- them. At this stage she alternated between 5:12 leaps, in the first attempts was only 5 leaps at the third attempt made 12 jumps already at the fourth attempt jumped 8 times.

In the fifth and last week, in the sections 9:10 managed to extend their heels reaching a maximum of 18 totaled leaps.

From the results of the activities proposed to it involve games that provide the improvement of your cardiorespiratory system because I believe that the biggest problem is the lack of physical fitness, as during the interventions was established a pattern where every approach she always managed to jump over the intermediate series, never in the early series, let alone in the final series. Currently, the biggest challenge we have is their neglect of the activities proposed in class, resulting in a low development, either for lack of interest, sometimes by the interference of family conflicts. Current actions are involving the engagement of the family, bringing her to school.

> With the emergence of language, born to a new world without borders, linked to the imagination, dreams and fantasies, designs and thoughts. Look closer, what we do with the body or the mind are not things that different. When someone thinks too much, can not get enough in theory: the exhaustion is certainly physical. Think would thus be a bodily activity. (Freire, 2010, p.41)

**CONCLUSION**

The difficulties of learning are usually related to the manner of how the child is related to you, or better, according to Guerra (2002), learning difficulties when establishing the child has problems in perceiving, understanding their world and relate with other people.

Thus, the physical education becomes a self factor, where the child knows himself, through activities that explore your body culture, layout and motor development. In this way, the movement that the child performs, it becomes fundamental aspect in the acquisition of cognitive structures, especially in children with Down syndrome.

The girl referred to in the article is in a period of development, named by Piaget, from Concrete Operations Phase. At this stage of development of concrete operations, the child reasons logically about concrete events and can classify objects of your world in various environments. The defining event is the reversibility with intellectual experimentation through active play.

It uses the physical education classes to explore their physical limits, respects the rules of the activities, acts autonomously, have initiative to participate in recreational activities. In the case of activities focused in class, the jump rope helps many ways to be an aerobic activity, it improves cardiovascular capacity, typical of children with this syndrome problem and works with the concept of space-time (simultaneity order and sequence, time intervals), rhythm and strengthens the muscle tônux.

> The child uses to play at this stage to understand physical and social world. Rules and regulations are the interests of the child when applied to games. The games, however, lose their characteristics assimilating and become a balanced cognitive thought process conditional. As a result, curiosity finds expression in the intellectual experimentation and not just in active play. (GALLAHUE, 2005, p.49)

For children with Down syndrome, motor and cognitive development occurs in the same way other children, however, at a much slower pace. Even as babies, children with Down syndrome should receive many stimuli engines, what we call essential intervention, a team conducts activities that encourage physical, cognitive and emotional maturation.

> Key findings of studies that describe the motor development of babies with Down syndrome include: (1) delays the onset and inhibition of primitive and postural considerations, (2) hypotonia and hyperflexibility and (3) substantial delays in reaching motor milestones . (GALLAHOE, 2005, p.115)

In the case of the activity of jumping rope, the child tests your limits, seeking to overcome them and generates situation of relationship with colleagues and teachers, as colleagues instigate and encourage the child to seek progress. What starts in Physical Education, integration and acceptance of diversity.

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**SCHOOL PHYSICAL EDUCATION - CHILD INCLUSION FACTOR WITH DOWN SYNDROME**

**ABSTRACT**

The physical education, as a field of knowledge, aims to address the culture of body movement. The task of a teacher of Physical Education is delicate because it must match the group's interests with those with special needs, the most diverse, given the individuality of each of its students. Faced with this task, realizes the increase in the number of students with Down syndrome in schools. Down syndrome is considered one of the most common birth defects of the world's population, it cognitive impairment is mild to moderate, so the stages of development and major evolutionary milestones are achieved, though at a slower pace. Thus, this study aims to examine how the physical education can interfere as inclusion factor in regular school, in particular, children with Down syndrome. I remember learning difficulties are established when children encounter problems in perceiving, understanding their world and relate to others in this panorama to physical education is a major factor of inclusion, because it can make use of motor coordination, expression and body culture, for cognitive development. In this way it minimizes the differences and offers possibilities for learning and social inclusion.

**KEYWORDS:** Physical Education School, Down Syndrome, Inclusion.

**ÉCOLE D'ÉDUCATION PHYSIQUE - FACTEUR DE L'INCLUSION DES ENFANTS AVEC SYNDROME DE DOWN**

**RÉSUMÉ**

L'éducation physique, comme un champ de connaissances, vise à répondre à la culture du mouvement du corps. La tâche d'un enseignant d'éducation physique est délicate car elle doit correspondre aux intérêts du groupe avec ceux ayant des besoins spéciaux, le plus diversifié, compte tenu de l'individualité de chacun de ses élèves. Face à cette tâche, se rend compte de l'augmentation du nombre d'élèves ayant le syndrome de Down dans les écoles. Le syndrome de Down est considérée comme l'une des anomalies congénitales les plus courantes de la population du monde, il est la déficience cognitive légère à modérée, de sorte que les stades de développement et les principaux jalons de l'évolution sont atteints, mais à un rythme plus lent. Ainsi, cette étude vise à examiner comment l'éducation physique peut interférer comme facteur d'inclusion à l'école régulière, en particulier, les enfants atteints du syndrome de Down. Je me souviens des difficultés d'apprentissage sont établis lorsque les enfants rencontrent des problèmes à percevoir, comprendre leur monde et se rapportent à d'autres dans ce panorama à l'éducation physique est un facteur majeur de l'inclusion, car il peut faire usage de la coordination motrice, l'expression et la culture du corps, pour le développement cognitif. De cette façon, il minimise les différences et offre des possibilités d'apprentissage et de l'inclusion sociale.

**MOTS-CLÉS:** Education physique scolaires, syndrome de Down, l'inclusion.

**ESCUELA EDUCACIÓN FÍSICA - INCLUSIÓN DE NIÑOS CON SÍNDROME DE DOWN FACTOR**

**RESUMEN**

La educación física, como un campo de conocimiento, tiene como objetivo abordar la cultura del movimiento del cuerpo. La tarea de un profesor de Educación Física es delicada, ya que debe coincidir con los intereses del grupo con los que tienen necesidades especiales, los más diversos, teniendo en cuenta la individualidad de cada uno de sus estudiantes. Frente a esta tarea, se da cuenta del aumento en el número de estudiantes con síndrome de Down en las escuelas. El síndrome de Down es considerado uno de los defectos de nacimiento más comunes de la población mundial, que el deterioro cognitivo es de leve a moderada, por lo que las fases de desarrollo y los hitos evolutivos importantes se logran, aunque a un ritmo más lento. Por lo tanto, este estudio tiene como objetivo examinar cómo la educación física puede interferir como factor de inclusión en la escuela regular, en particular, los niños con síndrome de Down. Recuerdo dificultades de aprendizaje se establecen cuando los niños se encuentran con problemas en la percepción, la comprensión de su mundo y relacionarse con los demás en este panorama a la educación física es un factor importante de la inclusión, ya que puede hacer uso de la coordinación motora, la expresión y la cultura del cuerpo, para el desarrollo cognitivo. De esta manera se minimiza las diferencias y ofrece posibilidades para el aprendizaje y la inclusión social.

**PALABRAS CLAVE:** Escuela de Educación Física, Síndrome de Down, de inclusión.

**EDUCAÇÃO FÍSICA ESCOLAR – FATOR DE INCLUSÃO DE CRIANÇA COM SÍNDROME DE DOWN**

**RESUMO**

A Educação Física Escolar, enquanto área do conhecimento, tem como objetivo tratar da cultura corporal de movimento. A tarefa de um professor de Educação Física é delicada, pois deve compatibilizar os interesses do grupo com aqueles que apresentam necessidades especiais, das mais variadas, atendendo as individualidades de cada um de seus alunos. Diante esta tarefa, percebe a elevação do número de alunos com Síndrome de Down nas escolas. A Síndrome de Down é considerada um dos defeitos congênitos mais comuns entre a população mundial, nela o comprometimento cognitivo é de leve

a moderado, desta forma as etapas do desenvolvimento e os grandes marcos evolutivos são atingidos, embora em um ritmo mais lento. Desta forma, este estudo tem por objetivo analisar o quanto a Educação Física Escolar pode interfere como fator de inclusão na escola regular, em especial, de crianças com Síndrome de Down. Lembro que as dificuldades de aprendizagem se estabelecem quando a criança encontra problemas em se perceber, perceber seu mundo e relacionar-se com outras pessoas, neste panorama a Educação Física Escolar é fator preponderante de inclusão, pois ela pode se valer da coordenação motora, expressão e cultura corporal, para o desenvolvimento cognitivo. Desta forma minimiza as diferenças e oferece possibilidades de aprendizagem e inserção social.

**PALAVRAS-CHAVE:** Educação física Escolar, Síndrome de Down, Inclusão.