

## 108 - ADAPTED MOTOR ACTIVITIES AS EXISTENCES INSTRUMENT OF BASIC ABILITIES IN CHILDREN WITH DOWN'S SYNDROME

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### Introduction

The precocious stimulation of motor experiences in children with Down's syndrome is fundamental to improve his development. Down's syndrome is an anomaly caused by a genetic accident, for trisomy 21, thus called out because of the presence of an extra chromosome 21. That makes the total number of chromosome be 47 instead of 46, that is the normal number. Children with Down's syndrome present some physical characteristics: Small mouth and slim lips, sparse and slim hair, perception difficulties, balance lack, muscle hypotonia and another. Most people with Down's syndrome present a certain increase in the articulations flexibility, denominated laxity ligament (WINNICK, 2004). All child with Down's syndrome presents retardation in his development. However, it is possible being stimulated precociously.

The practice of adapted activities is a way of providing to the student with deficiency terms of increasing his movements repertoire (DIEHL, 2006). The deficient children have their limitations, however can be stimulated in several aspects as: Cognitive, social, emotional and motor. The physical activity in their varied roles has the power of providing learning of facilitative way, in jokes form and games.

A program of physical activities addressed for this clientele offers specific activities and of quality, applied by professionals qualified for the intervention, always considering their difficulties and limitations.

That development motor process and of learning has his beginning in the maternal womb and continues for all life until the death. For GALLAHUE (2003) the motor education is a behavior motor alterations permanent process that is destined to the practice, to the encouragement, to the instruction and to context ecological of the environment itself.

The present study was developed in The Program of Motor Activities for Disabled Person - PROAMDE, from Federal University of Amazonas. PROAMDE has as objective develops student's potentialities, propitiating discoveries situations that did not yet have knowledge. Strategies are adapted, creating possibilities so that the student reaches the success in the achievements of the proposed exercises.

This article report the practice of motive activities with a PROAMDE's Group composed by twenty children with several kinds of deficiency, in the of age band from 2 to 6 years. In a period eight month were developed the next contents; Locomotion (crawl, roll, walk, run, walk in four supports, transpose obstacles and etc; Manipulation: launch, throw, grasp, tweezers and another. In the socialization were developed activities in little and great groups. Two children with Down's syndrome demonstrated a great evolution regarding initial evaluation during this period 8 month. One is female and the other is male; both they have 3 years old.

### Enable terms of developing their potentialities

Motivate, socialize, offer activities that does it think, feel and to act they are some important characteristics. Using strategies of clear, simple and joyful way, exploring the participation and student's creativity. There is not the ideal recipe, it fits to the teacher tries them with a favorable attitude the activities, so that it are a successful experience.

The experiences together motive with other areas as; cognition and socialization. They make the child accelerates her learning in her development process.

### Some facilitative means

- 1 Vary the activities of systematic form;
- 2 Create forms for child perform the activities spontaneously;
- 3 Select specific activities of his of age band, respecting his time of exercises execution.
- 4 Provide the constant access to the success.
- 5 Emphasize the independence behavior, increasing the initiative power.

### Method

This study belongs to qualitative character, seeking to describe the development degree of the motive abilities in children with Down's syndrome who practice adapted physical activities. The stages for the method.

### Measures instruments

- Initial evaluation, to student's level motor;
- Record of individual accompaniment, description detailed of the student, attention/concentration, relationship. It is motor intervention.
- Final evaluation, for comparison with initial evaluation to arrive to the result.
- Final report, that report is the results description of the individual accompaniment and of the evaluations.
- For the classes practice is compulsory that the student has a companion.

### Procedures

The classes are performed in UFAM/FEF's Gym by professionals and academic of Physical Education. The classes happened twice a week - to the Tuesdays and Thursdays, with duration of 1 hour and a half. The data collection is done through observations that are described in individual accompaniments after every class. For a period eight month were developed the next contents:

### Main existences developed motor through the Physical Education

**Locomotion:** Crawl, roll, walk in four supports, walk in six supports, run, walk, hop, transpose obstacles and etc.

**Manipulation:** New release, throw, grasp and another.

**Socialization:** Social rules, cooperation, solidarity, punctuality, mutual respect, assiduity, zeal with the materials, care

with the environment.

**Cognition:** Puzzle, colors identification, letters, numbers and illustrations.

**Fine motor coordination:** Mortise, disjoint, collages, cuttings baste, heap, drawings and tweezers.

The contents development is based on difficulties presented by the group in the initial evaluation. The activities are performed of recreative form in a pleasing environment.

### Results / Discussion

The obtained results are relative to how many and which ones development motor aspects and other aspects were improved in these participants.

Bruna (fictitious name), 3 years old, initially presented socialization difficulties and a great fondness with the mother during the classes. And to did not consequently take part in all the activities. Respecting her time of adaptation, during time the pupil was demonstrating interest by the activities and participating more. So that the mother just guided her doing her understand the activity, giving the support minimum. Nowadays the pupil performs the activities most of the time without help. She learned to crawl, roll, transpose obstacles, runs with more balance and better coordination. She demonstrated to like a lot of activities in couple and was cooperative in the exercises in team.

Matheus (fictitious name), 3 years old, presented the determined difficulties in initial evaluation; It was starting to floor without support, he performed some steps and therefore falls, dispersed with easiness, did not like activities in couple, did not accept colleague's proximity. He did not know how to roll; crawl; walk in four supports and etc. In the aspect motor, there was progress because nowadays he manages to walk independently during the activities, with parents' supervision. Improved his concentration and the discipline; He interacts more, accepting colleagues' proximity. He accomplished montage and mortise (simple montage) of toys and other objects of ludicrous manner. The final evaluation will be performed in December, where will be officialized the evaluations results.

Process of actions fundamental standards development when very related favor child motive executions new forms.

The results show that the children with Down's syndrome present a significant performance. Opposing the barriers imposed by the motor difficulties in the development phase and the characteristics of disabled, these students overcame. The results demonstrate a positive process, evidenced by the motor existences that the physical activity opportune.

### Final considerations

The motor activities managemented for children with Down's syndrome influence positively in the aspects motors, emotional and social, inclusive in the attention, concentration and relationship. However these factors were determinants for the utilization of the learn, of the discover and of the integrate himself.

The physical activity facilitates child's development with Down's syndrome, being an able to instrument propitiates a learning of ludicrous and spontaneous manner. Deficient children (Syndrome of Down) have their characteristics and particularities. However, they are able people of perform any task that a normal told child" executes, mostly when they are stimulated precociously.

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### ADAPTED MOTOR ACTIVITIES AS EXISTENCES INSTRUMENT OF BASIC ABILITIES IN CHILDREN WITH DOWN'S SYNDROME ABSTRACT

The precocious stimulation of motor experiences, in children with Down's syndrome, is fundamental to improve his development. Syndrome of Down or trisomy 21. This work refers to the practice of physical activities for disabled children. The Program of Motor Activities for Disabled Person - PROAMDE, from Federal University of Amazons report the practice of motive activities, with a group composed by twenty children with several kinds of deficiency, in the of age band from 2 to 6 years. In the period 8 month, they were developed contents with: Locomotion (crawl, roll, walk in four supports, transpose obstacles and etc. Manipulation: launch, throw, grasp, tweezers and another. In the socialization, they were developed activities in little and great groups. Two children with Down's syndrome demonstrated a great evolution during this period 8 month. One is female and the other is male, both it has 3 years old. The PROAMDE It has as objective develops student's potentialities, propitiating discoveries situations that did not yet have knowledge. Strategies are adapted, creating possibilities so that the student reaches the success in the exercises achievements. It is performed a motor assessment at the beginning and at the end of year, to verify student's level motor. The classes were performed the Tuesday and Thursday, with duration of 1 hour and a half. The data collection, it was done through observation and described in individual accompaniments after every class. Like result of this work the significant improvement in the next aspects was observed: socialization; larger interaction with the colleagues. In the aspect motor improved the balance and the locomotion. Emotional, at the beginning the participation in the activities only was with the mother, with the activities process there was the detachment. The practice of Physical Activity with parents' participation brought important contributions, for the children development process with Down's syndrome.

KEY-WORD: Motive activities, basic abilities.

## **ATIVIDADES MOTEURS ADAPTÉES COMME OUTIL DES HABILITÉS BASIQUES EN ENFANTS AVEC SÍNDROME DE DOWN**

### **RÉSUMÉ**

Le stimulation prématuré d'expériences moteurs, en enfant avec *Syndrome de Down*, c'est fondamental pour améliorer leur développement. *Syndrome de Down* ou *trissomia 21*. Ce travail si se relie à le pratique des activités physiques pour les enfants déficients. Le programme d'activités moteur pour déficients - PROAMDE, de l'Université Federal d'Amazonas il indique le pratique d'activités moteurs, avec un groupe composé pour vingt enfants d'insuffisance, dans l'âge de 2 (deux) les 6 (six) années. Dans le période de huit mois le contenu avait été développé avec : locomotion (dépister, rouler, *quadrupe*, transporter l'obstacle et etc). Manipulation : lancer, jet, *preensão*, pincette e autres. Dans la socialisation, groupe avait été développées activités dans petits et grands groupes. Deux enfants avec *Syndrome de Down* d'eu démontré une grande évolution dans l'écoulement de cette période de 8 (huit) mois. Une est du sexe féminin et l'autre masculin, les deux a trois années de l'âge. O PROAMDE il a comme objectif développer les potencialités d'élève, pour rendre propice situations de découverts que autant n'a toujours pas eues de connaissance. Des stratégies sont adaptées, créant des possibilités de ce fait l'extension d'élève le succès dans les realisations des exercices. Est réalisée une avaluation moteur en début et en final d'année, pour vérifier le niveau moteur d'élève. Les leçons avaient été portées par des mardi et samedi, avec la durée de 1 heure et bas. La collecte des données, a été faite a travers des observations et décrite dans le accompagnement individuel après chaque classe. Comme résultat de cet travail été observé l'amélioration significative des aspects suivants: *sociabilização*, une plus grand communication avec les collègues. Dans l'aspect moteur elle a amélioré l'équilibre et la locomotion. Émotif, dans le commencement que la participation aux activités était seulement avec la mère, avec le processus des activités a eu le desserrage. Le pratique d'activité physique avec la participation des parents il a apporté d'excellentes contributions, pour le procès de développement d'enfants avec *Syndrome de Down*.

MOTS-CLEF: Activités moteurs, capacités de base

## **LAS ACTIVIDADES MOTORAS ADAPTADAS COMO INSTRUMENTO DE EXISTENCIAS DE HABILIDADES BÁSICAS EN LOS NIÑOS CON SÍNDROME DE DOWN**

### **RESUMEN**

El estímulo precoz de experiencias motoras en niños con la Síndrome de Down (trissomia 21) es fundamental para mejorar el desarrollo. Este trabajo describe la práctica de actividades físicas para niños deficientes. El Programa de Actividades Motoras para Deficientes - PROAMDE/UFAM promueve la práctica de actividades motoras con un grupo compuesto por veinte niños con varios tipos de deficiencia (grupo etario de 2 a 6 años). En el período de 8 meses, los contenidos se desarrollaron con: locomoción (arrastrarse, rodar, *quadrupe*, transponer obstáculos, etc). manipulación: para tirar, yo echo, presión, pinzases y otro. En la socialización, se desarrollaron las actividades en los grupos pequeños y grandes. Dos niños con el Síndrome de Down demostró una gran evolución. Una muchacha y un muchacho (ambos tienen 3 años de edad). El PROAMDE objetiva desarrollar las potencialidades del estudiante, mientras propiciando situaciones de descubrimientos que ellos todavía no tenían el conocimiento. Se adaptan las estrategias, mientras creando las posibilidades para que el estudiante alcance el éxito en el ejercicios. Una evaluación motora es al principio cumplida y en el fin del año, para verificar el nivel del estudiante. Las clases eran martes y jueves, con la duración de noventa minutos. La colección del datos se hizo a través de la observación y describió en las asistencias individuales después de cada clase. Como el resultado de ese trabajo la mejora significativa se observó en lo siguiente aspectos: en el socialización, la interacción más grande con los amigos; en el aspecto motor, mejoró el equilibrio y la locomoción; en el emocional, al principio la participación en las actividades sólo estaba con la madre, con el proceso de las actividades había la separación. La práctica de Actividad Física, con la participación de los padres, hay traído contribuciones pertinentes para el proceso del desarrollo de los niños.

PALABRAS LLAVES: Actividades Motoras; Habilidades Básicas.

## **ATIVIDADES MOTORAS ADAPTADAS COMO INSTRUMENTO DE VIVÊNCIAS DE HABILIDADES BÁSICAS EM CRIANÇAS COM SÍNDROME DE DOWN**

### **RESUMO**

A estimulação precoce de experiências motoras em crianças com Síndrome de Down (trissomia do cromossomo 21) é fundamental para melhorar seu desenvolvimento. Este trabalho se refere à prática de atividades físicas para crianças deficientes, desenvolvidas no Programa de Atividades Motoras para Deficientes - PROAMDE/UFAM, e relata a prática de atividades motoras com uma turma composta por vinte crianças com diversos tipos de deficiência, na faixa etária de 2 a 6 anos. Em um período de 8 meses, foram desenvolvidos conteúdos como locomoção (rastejar, rolar, *quadrupe*, transpor obstáculos, etc); manipulação (lançar, arremesso, *preensão*, pinça e outros); na socialização foram desenvolvidas atividades em pequenos e grandes grupos. Duas crianças com Síndrome de Down demonstraram uma grande evolução no decorrer desse período de 8 meses. Uma do sexo feminino e outra do masculino, ambas com 3 anos de idade. O PROAMDE tem como objetivo desenvolver as potencialidades do aluno, propiciando situações de descobertas que ele ainda não tinha conhecimento. Estratégias são adaptadas, criando possibilidades, de maneira que o aluno alcance o sucesso nas realizações dos exercícios. É realizada uma avaliação motora no início e no final do ano, para verificar o nível motor do aluno. As aulas foram realizadas às terças e quintas, com duração de noventa minutos. A coleta de dados, foi feita através de observação e descrita em acompanhamentos individuais após cada aula. Como resultado desse trabalho foi observado a melhora significativa nos seguintes aspectos: *sociabilização*, maior interação com os colegas; no aspecto motor melhorou o equilíbrio e a locomoção; no emocional, no início a participação nas atividades era somente com a mãe, com o processo das atividades houve o desprendimento. A prática de Atividade Física com a participação dos pais trouxe relevantes contribuições para o processo de desenvolvimento de crianças com Síndrome de Down.

PALAVRAS-CHAVES: Atividades Motoras, Habilidades Básicas.