### 122 - EVALUATION AND CLASSIFICATION OF MOTOR DEVELOPMENT; SPAWNING PROJECT PARTICIPANTS OF UNIVERSITY OF SANTA CRUZ DO SUL – RS

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#### INTRODUCTION

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The human being, from conception, brings key components to their development. Although biologically prepared such development takes full form in the face of the action and interaction of other factors, foremost among them, under engine, access to stimuli. The traction motor involves numerous functions to the individual to ensure the possibility of moving. As they interact, through movement, the human being has access to all sorts of experiences that will lead to awareness of himself from the outside world and will enable the development of their physical capabilities, motor, cognitive, affective, communicational psychical (ROSANETO, 2007).

The intervention carried out in water is considered suitable for normal children and for those with special needs or motor deficit, because of the possibility of being practiced without restrictions, either from birth, and the benefits and facilities that provides for the execution of movements. Its purpose, according to a developmental approach, is to meet the core needs of the student, fostering the dynamic interaction between the characteristics of the performer, the task and the environment, aiming not only rehabilitation, but the increase in their motor repertoire. It is of paramount importance because it is understood as an individual's ability to make the field of water as it moves independently and securely using your residual functional capacity and respecting their limitations because water exhibits properties that facilitate this mobility without great effort. (GRASSELE and PAULA, 2002)

This work aims to evaluate the motor profile of people with disabilities enrolled in APAE (Association of Parents and Friends of Exceptional Children) of Santa Cruz do Sul and project participants Spawning (Swimming for People with Special Needs).

#### **METHODOLOGY**

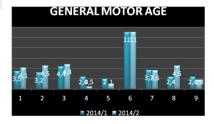
The methodology of this study was based on statistics Rosa Neto (2007), in which a scalar formula of Motor Development (EDM Kit (Motor Development Scale). To test the data analysis, the EPI-INFO version 6.0 was used, which .. appoint author of Manual Motor Evaluation This test has an adapted version for people with disabilities This research formed part 9 students, 5 males and 4 females, aged 5:14 years divided the following pathologies: cerebral Palsy (2), Down syndrome (3) and intellectual disability (4). in order to evaluate motor patterns of the participants. Through Motor Development Scale, aspects of Motricity Thin, Global Mobility, Balance, Scheme were analyzed body, Space Organization and Temporal Organization, comparing tests in May and October 2014. the lessons of the project occur three times a week: Mondays, Wednesdays and Fridays - being attended three classes per day lasting 50 minutes each class.

#### RESULTS

Looking at chart one, which shows the comparison of each student researched the period from March 2014 to September 2014, we observed an increase in their motor age of 44.4% as well as reduced motor age had 44.4% and only 11, 2% maintained their value.

The results of this study confirm what Souza (2005) argues that despite the tests indicate deficits in their results if these rates stimulated deficit may turn out to be smaller as the needs of each student, contributing to their development in all aspects, from the engines, the affective, cognitive and psychological passing by. For disabled swimming is understood as an individual's ability to master the water element in studies of Diehl, 2006 displacements independently and safely under and over water uses for this, all his residual functional capacity, and respecting their limitations. Ie, being in the water has improved the biological and physical condition of the student.

Chart one - Comparison of IMG students, expressed in years



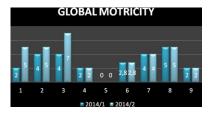
When analyzing the results separately for battery test, we can see the comparison between the months of May and October 2014, regarding the appearance Motricity Fina, that 55.5% of students maintained the same motor age, and 44.5% increased their values. As graph shows, students 1, 2 and 3, as such, individuals with Down syndrome, had increased his fine motor development. In this respect, one has to justify both the motor coordination to achieve small objects through the pool, rescuing them in the background of water submersion with only one hand, as the work by the external APAE. Children with disabilities have motor delays since the early stages of development neuropsychomotor, including large, fine motor skills and language development, varying the rhythm of each child, with a sequential and orderly process (BEE, 2003). In particular, the same global presents great physical difficulties, and therefore there has been a greater emphasis work with small muscles. The individual number 8 in the case with cerebral palsy, their percentage decreased due to lack of practice.

Graph two - Comparison of Thin Motricity (IM1) students, expressed in years.



Regarding Global Mobility tests we noticed that 22.3% of the students raised their values motor age, 77.7% maintained their previous values, corresponding to 6 students. As in Motricity Fina (IM1), is an aspect quite work activities in the pool, since the exercises and games require a working body schema. The Global Mobility requires the interaction between tone and balance, and the coordination of laterality, the notion of the body, space and time, creating a harmony of your body with the external environment (MANSUR; MARCON, 2006). The relationship between the inability of motor coordination and learning problems may indicate an increased responsibility for the integration of sensorimotor information (Waber; WEILER; BELLINGER; MARCUS; FORBES; Tripp et al, 2000) neural systems fragility.

Grasph three - Comparison of Global Mobility (IM2) students, expressed in year



According to graph four , which shows the comparison of the Motor Age Space Organization (IM5) students, we can see that 32.4% of students surveyed gained increased motor age, 44.4% maintained their average in comparison to 22, 2% reduced their values on drums proposal. Santos (2005), emphasizes that the movement as a medium, helps the child to acquire knowledge of the world around. Through his body, his perceptions and sensations, materials handling, the child gets the opportunity to discover yourself. Rosa Neto (2002), citing Piaget, falls in that time did not see or be seen, unlike the speed or the environment, it does not enter the realm of the senses, only in the spatial organization of events and movements in this way for of special needs patients, this is an aspect that is difficult to work with, because in many cases there is no sensitivity to perceive these actions. There should be greater integration of internal and external information to provide a spatial organization of living in their midst. Opposite of the numbers 1, 2 and 7, that fill their time with not only swimming, but with mental operations that leave the representative and intellectual space in APAE and give a sense of distance, area, volume, perspective and coordinates that determine your chances orientation and structuring of space in which they live.

Graph four - Comparison of Spatial Organization (IM5) students, expressed in year



The Temporal Organization, battery last evaluated, shown in graph five, shows that we achieved an increase of 22.2% in motor age, 22.2% maintained their average and 55.6% decreased their values compared. The mentally handicapped have a shortage in the temporal organization that does not allow you to integrate sensory and perceptual data from the physical environment and to establish relationships between objects in space and their own bodies (MANSUR; MARCON, 2006). Underscoring the result for which regressed, remember that these individuals are being adapted to the environment because somehow there was an intellectual breakdown. Awareness of memory retention and coding or processing information was modified and therefore can never be changed. There may be improvement in the results, but often depends on their emotional and motivational state presented in the days of evaluations, which influences the appearances and much.

Graph five - Comparison of Temporal Organization (IM6) students, expressed in years



### CONCLUSION

Through appropriate analysis of the results obtained from using the Motor Assessment Battery Rosa Neto study participants realized that the Spawning Project, have changes in motor function. The variables evaluated, General Motor Age, fine motor skills and global organization / spatial temporal. With the results that it has contacted the fine motor skills students demonstrated satisfactory, the results in the global motor function evaluated showed satisfactory results, Space Organization

has achieved good results, and the last of these aspects Temporal Organization showed satisfactory results, comparison of the motor age among participants Spawning Project showed that after the intervention participants had significant improvement. The results of this study reveals that the Aquatic activities when stimulated from childhood, can ease the mental deficits of children with this disorder. A child with mental disabilities should receive the right stimulus for its engine development, because if we do not receive this stimulation the child may have a higher deficit is still an effective alternative for promoting improvements in motor development. Thus, according to this study, where students were assessed individually, so one can trace an individualized treatment.

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### EVALUATION AND CLASSIFICATION OF MOTOR DEVELOPMENT; SPAWNING PROJECT PARTICIPANTS OF UNIVERSITY OF SANTA CRUZ DO SUL – RS ABSTRACT

This work aims at presenting the motor profile of participating students Spawning Project - "Swimming For Handicapped" intencionista project of the University of Santa Cruz do Sul - UNISC / APAE, acting for 30 years, serving students from more different pathologies. The project goal is to promote activities in the liquid medium so that the students increase their repertoire psychomotor and attitudes in the water and out of it when possible too. This research aims to assess the motor profile of participants Spawning Project in 2014 (1) March and reassessed in 2014 (2) October. The study gathered 9 students with Mental Disabilities, of both sexes, aged from 04 to 15 years. Mobility Thin and Global Spatial Organization and Temporal Organization: pre and post tests of Motor Development Scale (EDM), which comprise the following aspects were applied. With the results that it has contacted the fine motor deficit students presented the results in the global motor function evaluated showed satisfactory results and lower, Spatial Organization and achieved good results, and below the latter aspect assessed Temporal Organization showed satisfactory results, the comparison of motor age among participants Spawning Project showed that after the intervention participants had significant improvement. The results of this study reveals that the Aquatic activities is an effective alternative for promoting improvements in motor development. Thus, according to this study, where students were assessed individually, so one can trace an individualized treatment.

#### ÉVALUATION ET LA CLASSIFICATION DU DÉVELOPPEMENT MOTEUR; LES PARTICIPANTS AU PROJET PONTE DE LA UNIVERSITÉ SANTA CRUZ DO SUL – RS RÉSUMÉ

Ce travail vise à présenter le profil du moteur d'étudiants participant frai projet - "natation pour personnes à mobilité réduite" projet de intencionista de l'Université de Santa Cruz do Sul - UNISC / APAE, agissant pendant 30 ans, au service des étudiants de plus différentes pathologies. Le but du projet est de promouvoir les activités dans le milieu liquide afin que les élèves augmentent leur psychomoteur et attitudes répertoire dans l'eau et hors de lui si possible aussi. Cette recherche vise à évaluer le profil de moteur de participants frai projet en 2014 (1) Mars et réévalués en 2014 (2) Octobre. L'étude a rassemblé 9 élèves souffrant de handicaps mentaux, des deux sexes, âgés de 04 à 15 ans. Mobilité mince et Organisation mondiale du Territoire et de l'organisation temporelle: les tests de pré et post de développement moteur Scale (EDM), qui comprennent les aspects suivants ont été appliqués. Avec les résultats qu'elle a contacté les beaux étudiants de déficit moteur ont présenté les résultats de la fonction motrice globale évaluée a montré des résultats satisfaisants et inférieurs, l'organisation spatiale et obtenu de bons résultats, et au-dessous de ce dernier aspect évalué organisation temporelle ont montré des résultats satisfaisants, la comparaison des l'âge du moteur entre les participants frai projet a montré que, après les participants à l'intervention avait une amélioration significative. Les résultats de cette étude révèlent que les activités aquatiques est une alternative efficace pour promouvoir des améliorations dans le développement du moteur. Ainsi, selon cette étude, où les élèves ont été évalués individuellement, si on peut retracer un traitement individualisé.

# EVALUACIÓN Y CLASIFICACIÓN DE DESARROLLO MOTOR: PARTICIPANTES EN EL PROYECTO EI DESOVE DE LA UNIVERSIDAD DEL SANTA CRUZ DO SUL – RS RESUMEN

Este trabajo tiene como objetivo presentar el perfil del motor de los alumnos participantes El desove del proyecto "Natación para Discapacitados" proyecto intencionista de la Universidad de Santa Cruz do Sul - UNISC / APAE, actuando durante 30 años, sirviendo a estudiantes de más diferentes patologías. El objetivo del proyecto es promover actividades en el medio líquido de modo que los estudiantes aumenten su psicomotricidad y actitudes repertorio en el agua y fuera de ella cuando sea posible también. Esta investigación tiene como objetivo evaluar el perfil de motor de participantes El desove de Proyectos en 2014 (1) Marzo y reevaluado en 2014 (2) octubre. El estudio reunió a 9 estudiantes con discapacidades mentales, de ambos sexos, de edades 04 a 15 años. Movilidad Delgado y Organización Espacial Mundial y Organización temporal: las pruebas de pre y post de Desarrollo Motor Scale (EDM), que comprenden se aplicaron los siguientes aspectos. Con los resultados que se ha dirigido a las bellas estudiantes con déficit motor presentan los resultados en la función motora mundial evaluados mostraron resultados satisfactorios y más bajos, la organización espacial y ha logrado buenos resultados, y por debajo de este último

aspecto evaluado Organización Temporal mostraron resultados satisfactorios, la comparación de edad del motor entre los participantes el desove proyecto demostró que después de que los participantes en la intervención tuvo una mejoría significativa. Los resultados de este estudio revelan que las actividades acuáticas es una alternativa eficaz para promover mejoras en el desarrollo motor. Así, según este estudio, donde los estudiantes fueron evaluados de forma individual, por lo que uno puede trazar un tratamiento individualizado.

## AVALIACAO E CLASSIFICACAO DO DESENVOLVIMENTO MOTOR; PARTICIPANTES DO PROJETO PIRACEMA DA UNIVERSIDADE DE SANTA CRUZ DO SUL - RS RESUMO

O presente trabalho tem por objetivo a apresentação do perfil motor dos alunos participantes do Projeto Piracema – "Natação Para Portadores de Necessidades Especiais", projeto intencionista da Universidade de Santa Cruz do Sul – UNISC/APAE, atuando há 30 anos, atendendo alunos das mais diferentes patologias. O objetivo do projeto é promover atividades no meio líquido de forma que os alunos aumentem seu repertório psicomotor e de atitudes na água e quando possível fora dela também. Esta pesquisa tem por objetivo avaliar o perfil motor dos participantes do Projeto Piracema em 2014(1) Março e reavaliados em 2014(2) outubro. Participaram desta pesquisa 9 alunos portadores de Deficiência Mental, de ambos os sexos, com idades entre 04 e 15 anos. Foram aplicados pré e pós testes de Escala de Desenvolvimento Motor (EDM), que compreendem os seguintes aspectos: Motricidade Fina e Global, Organização Espacial e Organização Temporal. Com os resultados obtidos contatou-se que na motricidade fina os alunos apresentaram déficit nos resultados, na motricidade global os avaliados apresentaram resultados satisfatórios e inferior, Organização Espacial obteve resultados bons e inferior e o último aspecto avaliado Organização Temporal mostrou resultados satisfatório, a comparação da idade motora entre os participantes ob Piracema demonstrou que após a intervenção os participantes obtiveram melhora significativa. Os resultados deste estudo releva que as atividades Aquáticas é uma alternativa eficiente para a promoção da melhoria no desenvolvimento motor. Sendo assim, de acordo com esse estudo, onde os praticantes foram avaliados individualmente, assim pode-se traçar um tratamento individualizado.