1. Title of the Project:

Saying No to Disability: Psychomotor Development in Children with Disabilities

2. Rationale

Sensory integration begins in intrauterine life, and develops due to interaction with the environment, through adaptive responses. The nervous system (NS) is the organ responsible for integrating the various sensations received.

The process by which the central nervous system (CNS) locates, classifies and organizes sensory impulses, and transforms sensations into perception so that man can interact with the medium is called sensory integration.

Sensory integration offers opportunities for the subject to organize his behavior, providing the conditions to explore his needs and for the SN to organize the stimuli; thereby producing appropriate adaptive responses required by the environment. When this happens properly, the process called Integration or Sensory Processing occurs. When the CNS has difficulty processing and organizing the information received, and does not prepare an adequate response to the stimulus, it means that there is a deficit in sensory processing.

Children with cerebral palsy and other neuromotor deficiencies often have sensory processing dysfunctions, which sometimes impose greater limitations than neuromotor disorder. In these cases, the use of sensory integration techniques interferes positively in the level of alertness, postural control, postural tone, interpretation and regulation of motor actor rhythm velocity, motor sequence initiation, motor planning abilities and functional performance.

The process of intervention to the subjects that present deficits in sensorial processing, aims to provide sensory input, processing / integration and sensorial output. Through the organization of the information received and the favoring of adaptive responses, it favors the reduction of the sensorial dysfunctions presented.

The professionals involved will be able to intervene in order to favor reception, processing and adaptive response to the environment, through the integration of sensorial information that will be provided in front of the stimuli offered in a sensory integration room.

Finally, the target audience will benefit from the implementation of this service, due to the sensory integration being important in the performance of the presented deficits, thus minimizing the detected dysfunctions; intervening in order to favor the reception, processing and emission of adaptive responses to the environment, through the integration of sensory information that was provided during the intervention.

3. Team Project

Name	Company / Entity	Function in Project
Elza Ramos	APAE	Project Owner
Flávia Garcia	APAE	Key User
Rosinei	APAE	Key User
Marcos Zorzan	ROTARY	Project Manager
Douglas Lemo	ROTARY	Project Coordinator
Gervásio Menosse	ROTARY	Financial
André Baraldo	ROTARY	Rotary Foundation
Luiz Carlos Anadão	ROTARY	Institutional Relationship
Leandro Bomediano	ROTARY	Public Image

4. Description of the Project

The project consists of the acquisition of specific equipment for the psychomotor development of students at APAE in Pirapozinho / SP-Brazil, serving 100 people with different types of disabilities.

Sensory integration is a care methodology developed by an Occupational Therapist for professionals in the area, but currently, it has opened this therapeutic intervention to other rehabilitation professionals, such as physiotherapists and speech therapists.

Sensory Integration is the process by which the brain organizes the information, so as to give an adequate adaptive response, thus organizing the sensations of the body and the environment in order to be able to use it efficiently in the environment.

The method aims at the quantity and quality of stimuli provided to the subject, in order to seek a modulated balance, thus giving an answer that is in accordance with their abilities and with the environment, improving the performance of a child in his / her learning process. From this, it defines sensory integration as the innate ability to organize, interpret sensations and respond appropriately to the environment, in order to assist the human being in the functional use, in the activities and occupations performed in the day to day.

5. Target Audience

- ✓ Students: Children, adolescents and adults, aged Zero to 55 years old, who present motor and sensory deficits, motor incoordination, delays in gross and fine motor skills, balance deficits, apraxia and children with Autism Spectrum Disorder.
- ✓ The Student Family: With the accelerated development, families will benefit from the results of the project, where they will have at home a more independent person with more perspective of a "normal" life in their studies, physical activities, professional life, etc.
- ✓ The Community: As a result of the students' individual results and gains to their families, the community in general benefits from this project, with families that are healthier from a physical point of view, such as an emotional one. It also benefits from having fewer and fewer people whose disabilities are a limitation to life in society, constituting new families, working in the labor market, serving in social contributions.

6. Methodology

The APAE of Pirapozinho has been seeking to innovate its methodology, offering new treatment techniques through sensorial integration, as a coadjuvant in the prevention and treatment program of children with neuroimaging development, neurological and sensory deficits.

Through the anamnesis and initial evaluation by the qualified professional, the therapeutic planning is elaborated. The aim of the approach is to promote the integration of sensations, especially the tactile, vestibular and proprioceptive system. Being worked developed through playful activities and with the active participation of the user; thus increasing the processing ability of the information and responses appropriate to the stimuli.

The therapy takes place in an organized, motivating, joyful environment, rich in materials and suspended equipment and soil, promoting a sensorial offer adequate to the possibilities and needs of the user.

The frequency and duration of the sessions will be determined according to the evaluation, treatment plan, to meet the individual needs of each user. The sensory organization facilitates the development of the corporal scheme, maturation of reflexes, postural safety, bilateral awareness and motor planning.

7. Project Benefits

- Promote improvement in student behavior;
- Facilitate adaptive physical and emotional responses;
- Provide a higher alert level;
- Create a playful environment;
- Allowing an understanding of how the student becomes aware of his / her body and the possibilities of expressing themselves through the body, locating in time and space;
- Improve movements: global and fine motor coordination, and static and dynamic balance;
- Influencing learning ability: concentration in particular;
- Contribute to the successful achievement of the challenges proposed in the activities;

8. Key Success Criteria

The items below will be evaluated and calculated monthly in partnership with the beneficiary entity.

- ✓ Number of students attended;
- ✓ Evolution of children through specific activities with new resources (equipment);
- ✓ Rate of social inclusion of students;

9. Main Project Deliveries

- ✓ Technical project analysis
- ✓ Registered Rotary Foundation project
- ✓ Feature provided by Partners and The Rotary Foundation
- ✓ Equipment purchased
- ✓ Equipment delivered
- ✓ Entity mounted infrastructure
- ✓ Training of instructors and teachers
- ✓ Project delivery report

10. Term

100 days after release of financial resources (See Macro Schedule in item 15)

11. Investment

US \$ 30,000.00 in equipment, adjustments of the room structure and training of the instructors and teachers of the entity regarding the use of equipment

12. Restrictions

- Technical specifications of the necessary equipment
- Training of the instructors and teachers of the entity

13. Assumptions

- Partnership with the Rotary Club of Brazil and the World
- Appeal made available by The Rotary Foundation
- Implemented according to technical analysis
- Deadline and budget met
- Results obtained within the planned

14. Rotarians Involved

- ✓ 05 Partners directly involved in the project:
 - o the Community Mapping of the needs with the entities, in order to identify the main demands of projects;
 - Contact with potential partners to sponsor the project in conjunction with Rotary and the District;
 - o Structuring of the project to formalize the application for Global Grant;
 - o Project management: contact with sponsor, service provider, District 4510, beneficiary entity, deadlines, quality of services and materials and budget.

15. Macro Schedule

- Jan / 19 Rotary System Project
- Feb / 19 to Apr / 19 Funded Resources
- Apr / 19 to May / 19 Project Approved by Rotary Foundation
- May / 19 Equipments Purchased
- Jul / 19 Installed Structure
- Aug / 19 Project in Operation

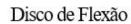
"Disability is in the Eyes of the One Who Sees"

Elza Ramos Marcos Antônio Zorzan
Project Owner Project Manager
Coordinator APAE President Rotary Club Pirapozinho
Pirapozinho/SP - Brazil District 4510 – 2018-2019

ATTACHMENT

I – Equipment Model

Airwalker



Escada Suspensa







Planador Suspenso

Rede de Equilíbrio

Rolo Suspenso com apoio dos pés







Trapézio

Plataforma Swing

Body sock P







Circo Sensorial



Centro de Atividades







Tapete de Sensações

Playground Soft Climber

Escorregador Grande







Dominó Gigante

Rolo e Cilindro

Casa Queijo







Bola Suiça

Bola Feijão Arktus

Rolo Sólido







Rampa com Carrinho



Caminho Múltiplo







Paraquedas Infantil

Rede de Expansão





NOTE: The fixing system for the use of suspended equipment will depend on how the ceiling and walls of the rooms are. Below are some pictures taken from the internet. It is important that several devices are suspended at the same time.



