

# THE CHALLENGE OF STRUCTURING THE ROUTINE OF CHILDREN WITH DISABILITY AND THE USE OF APP AS A FACILITATOR RESOURCE.

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## **ABSTRACT**

Structuring the routine of a child with disability is not an easy task. It is known that the use of images is a very favorable resource for understanding what should be done and how to plan and/or perform an action. Most of the time it is necessary to use photos, since they refer to the reality of the child, which facilitates the understanding. In this paper, we will see how the app "My Special Routine", a customizable software that uses routine organization structure, empowers aspects of autonomy and independence of the user, considering the challenges of the routine of children with disability.

## **TEXT**

When we think about the daily life of a child with disability, almost as a synonym we remember of therapies and an exhaustive schedule. Not rare, followed by the questioning: have these children had time to live their childhood?

In relation to the therapies, it is known that the child develops by the contact with the world, participating in the challenges of

everyday life, whose complexity is progressively extended.

The science that deals most with the child's doing is Occupational Therapy, since its object of study is human doing – called as the study of the required tasks and/or of interest of the person which will allow them to be independent, autonomous and that is always evolving in its development. Thus, we can face the tasks of your daily living as an incessant fuel to your development, both in the physical, cognitive, sensorial and even social scope, since we will hardly have a task in which it will be used only one area of this person.

When we think about the tasks of a child, we talk about eating and feeding, self-care, play, school tasks, leisure and sleep. From these tasks, two questionings arise and guide the discussion: will a child who performs all these activities develop and become independent? Will a child with disability with their specific difficulties perform and absorb these tasks in the same way?

Children with disabilities have a modified routine, often giving more emphasis to therapies and clinics, often to the detriment of the everyday tasks, which are as important as those performed in a clinical setting.

Thinking about reductionist care to your workplace can be risky even for the practical use of the occupational skills acquired. Under this view, we can then think that a routine structuring may (or must) be created thinking in the general context of the child, not dividing them into sectors and thinking about the totality of their functioning.

In occupational therapy, using a bit of sensory integration theories, it is very common to hear that the child needs to be ready, or modulated, to receive an information, and only then they will be able perform it properly. This modulation is the translation of a well-being, feeling good, feeling able, in sensorial terms, to perform the task.

By the cognitive bias, we realize that a person can better perform an activity if they know what is in their waiting. If we think of the child with disability, regardless of its scope, a modulation difficulty is perceived, which makes required activities, in contexts of rapid changes of routines or even without early notice, are not as well performed as if they were organized.

Provided with information, facts, and reports and especially, knowing the real interests of the subject in question – the child – the structuring can be proposed in different ways. Thus, the therapist must immerse in the child's world, so the meaning is made by them.

The object of study of this paper is not to decharacterize the clinical or even school care, quite the opposite. The aim is to base a context service, believing that an intervention

unrelated with the reality of the child will not have a use according to the potential of offer.

It is also perceived a difficulty in the exchange of information between all quasi-business structure that a child with disability demands. The lack of dialogue or integration causes children – often without structured speech and language – to fail to report events that have occurred, making the therapeutic monologue to suggest activities decontextualized for their practice, in addition to the loss of various important information.

By creating a structured network of information parents, family members, teachers, physicians and therapists will be able to give continuity to matters, activities, and carry ideas from one place to another, which will facilitate the use of acquired skills as isolated components, in all environments, since it is very common to hear that a child performs this task in an environment but not in another; one of the hypotheses of this happening is because the child cannot transcribe a learning from one activity to another.

The use of images is highly conductor and facilitator to the carry out activities, with this support the planning and execution become more concrete, allowing to check if already performed a step of a task or not, and having clues of what are the next events, chances of task execution failure are greatly reduced.

The use of technology is highly relevant as a way of resource rather than substitution, as shown in Butler et al. (2001) studies which shows us that the individuals who use hardware

and software have more ease to bring pedagogical content into practical life.

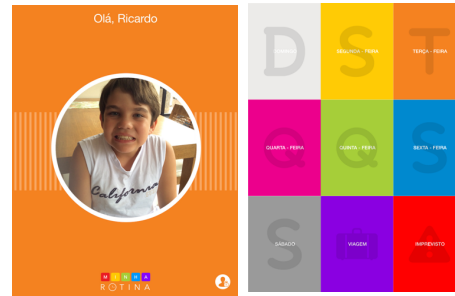
The life of a child with disability for the parents may seem like the administration of a company, since it is necessary to connect interdisciplinary knowledge from professionals who often are not in the same centers.

Oftentimes it is difficult to balance between school and rehabilitation, even though they are so connected, a professional of extreme importance is the specialized teachers, who bring important information for the therapeutic plans, besides leading the practice with the child. Studies, such as that of Magiera and Zigmond (2005) show a greater participation of students who have these professionals in the process of school inclusion.

Faced with all these challenges, we find in technology an excellent possibility of effective communication, through e-mail groups, social networks in closed groups, instant messaging network, not forgetting that these tools must be integrated to the real system of information network, that is, virtual does not eliminate the real contact.

The need for context connection was one of the purposes of creating the app for My Special Routine. The software proposal is precisely to organize the child's routine from the personalization of their activities and planning for each one, so that the child understands the steps and function of each one. In addition, the interaction between professionals is facilitated, from real photos of everyday life and their performance in the

activities, so that caregivers, teachers and therapists can follow the evolution as well as have access to reports, exchanging information and setting common goals according to the child's development. (Attachment 1 - screenshot My Special Routine)



Of course, a program or tool does not exempt the participation of the people who follow this routine, on the contrary. It is essential that an effective organization occurs with professional orientation and the involvement of the various specialists involved. From a more organized and clear routine for the child, the intention is that their participation is even more effective, as the fuel for their development. We must use real world, since the context proposal is being exposed, this must be the concept of an action thought in the day to day.

That's why the My Special Routine app is customizable, both with photos and audios from familiar people, so that they feel comfortable and understand (whether by images, sounds or both) each proposed activity, each everyday task and how it is organized, what are the steps to execute it. (Image 2 My Special Routine, screens)

The fragmentation of activities becomes as necessary as the anticipation of a day's tasks. Understanding each step of an activity does not intend to automate for doing always in the same manner, instead, will promote the comprehension of each step and that much beyond beginning, middle and end, each step will be important for concept acquisition and a real exploration of doing. Having this structure of images, for instance, for children with autism, supports greater independence and autonomy in classroom, as we can see in the studies of Pierce et al. (2013).

## REFERENCES

- 1-CAVALCANTI, A. e GALVÃO, C. *Terapia Ocupacional: Fundamentação e Prática*, Rio de Janeiro: Gunabara Koogan, 2007.
- 2-LOURENÇO, Geruxa F. Possibilidades de ação do Terapeuta Ocupacional na Educação Infantil: Congruência com a proposta da Educação Inclusiva, *Cadernos de Terapia Ocupacional da UFSCar*, São Carlos, May/Aug 2010
- 3-MAGALHÃES, Livia de Castro. *Terapia Ocupacional com crianças especiais: uma perspectiva funcional*. In: SOUZA, Ângela Maria Costa (Org.) *A Criança Especial: temas médicos, educativos e sociais*. São Paulo: Roca, 2003. P. 239-256.
- 4-AMORIM, Elizabeth. *Organização do tempo e do espaço* In: *O cotidiano no centro de educação infantil*. Brasília: UNESCO, Banco Mundial, Fundação Mauricio Sirotsky Sobrinho, 2005.
- 5-BATISTA, Rosa. *A rotina no dia a dia da creche: Entre o proposto e o vivido*. Florianópolis-SC. *Dissertação (Mestrado em Educação)* Universidade Federal de Santa Catarina, 1998.
- 6- CAVASIN, Rosane França. *A organização das rotinas com crianças de 0 a 3 anos e sua relação com o referencial curricular nacional para educação infantil- RCNEI*. Joaçaba-SC. *Dissertação (Mestrado em Educação)* Universidade do Oeste de Santa Catarina, 2008.
- 7-ARAUJO, R. C. T.; DELMASSO, M. C. S. *Educação Inclusiva: questões relacionadas à incapacidade e ao desempenho*. In. OMOTE, S.; GIROTO, C. R.M. ; OLIVEIRA, A.A.S. (Org.). *Inclusão escolar: as contribuições da educação especial*. Marília: Cultura Acadêmica Editora e Fundepe Editora, 2008.
- 8-BUTLER, F. M.; MILLER, S. P.; LEE, K.; PIERCE, T. *Teaching Mathematics to Students With Mild-to-Moderate Mental Retardation: A Review of the Literature*. *Mental Retardation*. vol.39. n.1. Feb.2001. p.20-31.
- 9-DESAI, T.; CHOW, K; MUMFORD, L; HOTZE, F; CHAU, T. *Implementing an iPad-based alternative communication device for a student with cerebral palsy and autism in the classroom via an access technology delivery protocol*.

Computers & Education. vol.79. Oct. 2014.  
P.148-158

10-LIU, T.; BRESLIN, C. M. The Effect of a  
Picture Activity Schedule on Performance of the  
MABC-2 for Children With Autism Spectrum  
Disorder. Research Quarterly for Exercise and  
Sport. vol.84. n.2. May 2013. p.206-21.

11-MAGIERA, K.; ZIGMOND, N. Co-Teaching in  
Middle School Classrooms Under Routine  
Conditions: Does the Instructional Experience  
Differ for Students with Disabilities in Co-  
Taught and Solo-Taught Classes? Learning  
Disabilities Research & Practice. vol.20. n.2.  
2005. p.79-85.

12- PIERCE, J. M.; SPRIGGS, A. D.; GAST, D.  
L.; LUSCRE, D. Effects of Visual Activity  
Schedules on Independent Classroom  
Transitions for Students with Autism.  
International Journal of Disability, Development  
and Education. vol.60 n.3, Oct. 2013, p.253-  
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