

# Guide for pedagogical intervention with autistic students



**Edilma Rodrigues de Oliveira**  
**Ivanete da Rosa Silva de Oliveira**  
**Maria Aparecida Rocha Gouvêa**



Mestrado Profissional em Ensino em Ciências  
da Saúde do Meio Ambiente

### FICHA CATALOGRÁFICA

Bibliotecária: Alice Tacão Wagner - CRB 7/RJ 4316

O48g Oliveira, Edilma Rodrigues de  
Guide for pedagogical intervention with autistic students. / Edilma  
Rodrigues de Oliveira. - Volta Redonda: UniFOA, 2023. 39 p.  
Texto em inglês.

Orientador (a): Profª Dra. Ivanete da Rosa Silva de Oliveira  
Coorientador (a): Profª Dra. Maria Aparecida Rocha Gouvêa

Produto (Mestrado) – UniFOA / Mestrado Profissional em Ensino em  
Ciências da Saúde e do Meio Ambiente, 2023.

ISBN: 978-65-88877-72-2

1. Ciências da saúde - produto. 2. Transtorno do espectro autista. 3. Avaliação de habilidades - autista. 4. Formação docente – inclusão. I. Oliveira, Ivanete da Rosa Silva de. II. Gouvêa, Maria Aparecida Rocha. III. Centro Universitário de Volta Redonda. IV. Título.

CDD – 610



I dedicate this work to all who fight for the cause of Autism, which encouraged me to carry out this didactic-pedagogical intervention proposal, especially to my family and friends, who have always supported and encouraged me in my search for personal and professional growth.

To my advisor, teacher Dr. Ivanete da Rosa Silva de Oliveira, for guiding me on this path and serving as an example as a teacher and researcher. To Prof. Dr. Maria Aparecida Rocha Gouvêa, who, as a collaborator of this product, was much more than a careful professor but a true friend, a wise counselor, and an example of endless strength, even in the face of life's difficulties.

To the teaching staff for always being willing to help.

To the secretaries of MECSMA for their help in bureaucratic matters and affection. To my students, who made me seek knowledge on this journey.

**"Inclusion is to leave the schools of the different and promoting the school of differences." (Maria Teresa Égler Mantoan, 2015 p.17.)**

# Summary

|                                                                                                     |    |
|-----------------------------------------------------------------------------------------------------|----|
| 1. INTRODUCTION.....                                                                                | 6  |
| 2. PRE-ACADEMIC AND ACADEMIC SKILLS OF STUDENTS WITH ASD.....                                       | 9  |
| 3. LEARNING SKILLS PEDAGOGICAL INTERVENTION FOR STIMULATION AND DEVELOPMENT OF LEARNING SKILLS..... | 20 |
| 3.1 Student Orientation.....                                                                        | 23 |
| 3.2 Games Skills Intervention.....                                                                  | 29 |
| REFERENCES.....                                                                                     | 36 |

# 1. Introduction

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder marked by repetitive behavior patterns and obstacles to social interaction that compromise the development of the person with ASD. The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), defines ASD as the occurrence of persistent impairments in social interaction and the presence of restricted and repetitive patterns of behaviors, interests, or activities.

In the school context, teachers play an important role regarding the development of children who need intervention in skills such as language, social interaction, executive function, attention, memory, perception, etc. Therefore, their knowledge on the subject can contribute to an early and appropriate referral for the good development of this individual.

Frequently, in the educational context, children with ASD are received with problems of adaptation to the regular school as well as difficulties in developing the necessary skills for the school context and life, as confirmed by the testimony of many parents and teachers.

Considering the collection of information data and Brazilian numbers, the Brazilian Institute of Geography and Statistics (IBGE - 2019) still does not have information on how many autistic people there are in Brazil.

According to the 2021 Census of the municipality of Resende, RJ, locus of application of this educational product, there are 163 children with Invasive Developmental Disorder (IDD) enrolled in the municipal education network. With the data offered by the Multiprofessional School Advisory Center (CEMAE), the municipality has 64 public school units in addition to a Specialized Care Center for autistic people, an important reference space in the care of children with ASD up to 17 years old.

Professionals who work with this population need resources and strategies for the pedagogical intervention of students with ASD, as well as need knowledge to insert new learning tools. To promote articulation between theory and practice, with a theoretical basis and proven practices supported by scientific evidence, it is possible for the teacher to perform the evaluation and propose pedagogical intervention for this public, allowing the inclusion and adequate development of the student with ASD.

Ribeiro (2007) conducted a pilot study with children aged 7 to 13 years in the interior of So Paulo. Where, only in 2007, the rate found was 0.88%, with the survey of Invasive Developmental Disorders (TIDs) keeping the prevalence higher among boys than among girls, with a ratio of 3:1. In this work, the results pointed to 1 autistic for every 367 children, a survey carried out in only one neighborhood with 20 thousand inhabitants in a city. Unfortunately, there is still no research in Brazil regarding the numbers of cases and prevalence of autism.

But it is possible to equate these data with the CDC (Center for Disease Control and Prevention) report, published on December 3, 2021. This indicates that one in 44 children, at the age of 8, in the United States is diagnosed with Autism Spectrum Disorder (ASD).

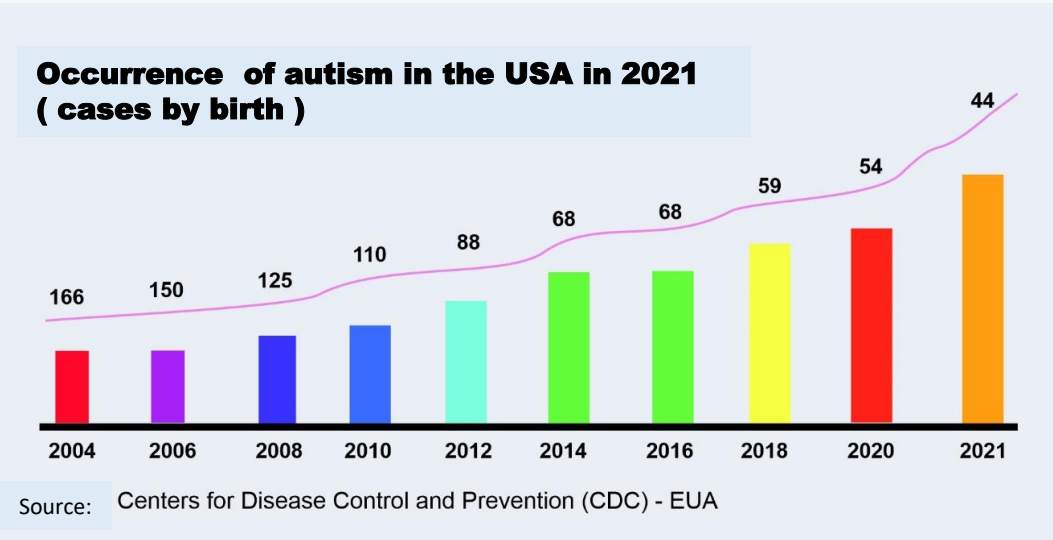


Figure 1: Prevalence of Autism in the US – 2021.



This educational product is part of the research developed in the Professional Master's Program in Teaching in Health and Environmental Sciences of UniFOA (MECSMA), called **DEVELOPMENT OF SKILLS OF AUTISTIC STUDENTS: PROPOSAL FOR TEACHING INTERVENTION**, guided by teacher Dr. Ivanete da Rosa Silva de Oliveira and collaborator teacher Dr. Maria Aparecida Rocha Gouvêa, aiming to offer support for evaluation and pedagogical intervention to teachers working with people with autism. It is important to emphasize that the process of including students with ASD in regular school should consider two processes: the evaluation of the pre-academic and academic skills of the student with ASD and pedagogical intervention for stimulation and development of skills for learning.

## 2. Pre-academic and academic skills of students with asd

Data collection to understand pre-academic and academic skills aims to enable the mapping of pedagogical actions and subsidize evidence that allows the expansion of the strategies used to better meet the demands of the student with ASD.

In this perspective, the interview is the moment when it is possible to welcome and respect and understand the struggles and pains that, in many moments, those responsible (most of the time, the mother) face. They usually feel physically exhausted and emotionally drained by the challenges of everyday life. It is necessary, at that moment, to welcome them, leaving aside any kind of judgment.

Professionals must know the learning possibilities of individuals with ASD, the factors that can favor their evolution, and the specific demands of the subject. Therefore, only after understanding the situation of each subject will the professional be able to collaborate with the personal construction process of each of these individuals (BLANCO, 2004, p. 292).

In the face of so much demand and reconfiguration, it is important to carry out the interview before the beginning of the assistance to identify the student's abilities, giving voice to those who take care of him or her on a daily basis. In this way, you will have data on the student's development to promote the appropriate pedagogical intervention.



**SUGGESTED INTERVIEW SCRIPT**

The interview plays a crucial role, as through the collected reports, we are able to get to know the behavior of the autistic student in the family environment. This allows the professional to have a deeper understanding of the challenges that need to be addressed and the goals and skills that need attention and development. The main objective of this interview is to obtain valuable information that helps to design personalized and effective strategies to promote the student's progress and well-being. By understanding the family reality, the professional has the possibility of creating an inclusive and welcoming educational environment in which the necessary support can be offered for the student to reach their full potential.

Interview date:\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Lecturer: \_\_\_\_\_

School:\_\_\_\_\_

Interviewee: \_\_\_\_\_Kinship: \_\_\_\_\_

Start of the interview: \_\_\_\_\_ h – End of interview: \_\_\_\_\_

**IDENTIFICATION INFORMATION:**

Child’s name: \_\_\_\_\_

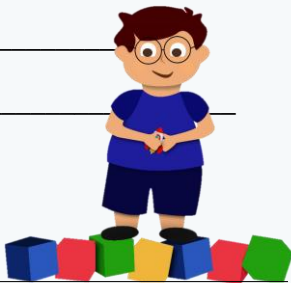
Birth date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Age: \_\_\_\_\_ Gender: ( ) M ( ) F CID: \_\_\_\_\_

mother’s name : \_\_\_\_\_

Age: \_\_\_\_\_ Educational level:\_\_\_\_\_ Profession:\_\_\_\_\_

Father's name: \_\_\_\_\_

Age: \_\_\_\_\_ Educational level:\_\_\_\_\_ Profession:\_\_\_\_\_



This interview is linked to the research entitled in the master's program,  
part of the Guide for evaluation and pedagogical intervention of autistic students.  
Prepared by Edilma Rodrigues de Oliveira, supervised by Professor Ivanete Rosa da Silva Oliveira and Maria Aparecida Rocha Gouvêa.

Chart 1: suggested interview script with the person responsible for the person with ASD.

Child’s siblings name:

| Siblings names | Age | Half brother or sister? | Adopted child? |
|----------------|-----|-------------------------|----------------|
|                |     | ( ) Yes ( ) No          | ( ) Yes ( ) No |
|                |     | ( ) Yes ( ) No          | ( ) Yes ( ) No |
|                |     | ( ) Yes ( ) No          | ( ) Yes ( ) No |

Who lives with the child?

Who helps the child in the absence of caregivers?

Evaluations conducted :

|                  |                            |                      |
|------------------|----------------------------|----------------------|
|                  | Types of exams/assessments | Age exams/assessment |
| Neurological     |                            |                      |
| Genetical        |                            |                      |
| Speech Therapist |                            |                      |
| Psychological    |                            |                      |
| Others           |                            |                      |

Types of care attended (start date and weekly frequency):

Continuous medication use ( ) No ( ) Yes

Which ones:

## Exhibits self-injurious behavior

1- Hitting him/herself (e.g. slapping face, hitting head on objects):

( ) No ( ) Yes

Which ones:

---

2- Biting or sucking various body parts:

( ) No ( ) Yes

Which ones:

---

3- Pinching, scratching, pressing or pulling various parts of the body (e.g. pressing the eyeball, pulling the hair)

( ) No ( ) Yes

Which ones:

---

4- Vomiting and repeatedly vomiting and re-ingesting food (rumination).

( ) No ( ) Yes

Which ones:

---

5- Consuming inedible substances (eating objects, cigarettes, feces).

( ) No ( ) Yes

Which ones:

---

## **Exhibits self-stimulatory behaviors**

1- Vision: staring at lights, moving fingers in front of eyes, waving hands in front of eyes, waving hands.

( ) No ( ) Yes

Which ones:

---

2- Hearing: covering ears, snapping fingers, making vocal sounds.

( ) No ( ) Yes

Which ones:

---

3- Touch: rubbing the skin with a hand or object:

( ) No ( ) Yes

Which ones:

---

4- Taste: putting body parts or objects in the mouth, licking them:

( ) No ( ) Yes

Which ones:

---

5- Smell: smelling objects, smelling people:

( ) No ( ) Yes

Which ones:

---

## Presents sphincter control

| Anal                                                                                                               | Vesical                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> diurnal<br><input type="checkbox"/> nocturnal<br><input type="checkbox"/> without control | <input type="checkbox"/> diurno<br><input type="checkbox"/> noturno<br><input type="checkbox"/> without control |

Was there a loss of the habit of sphincter control already acquired?

☐ Yes ☐ No

How were the circumstances of the loss of the habit?

---

## Self care (consider chronological age)

|                                                                                    |                                                                                                         |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Bathing (independently)                                                            | <input type="checkbox"/> no<br><input type="checkbox"/> yes<br><input type="checkbox"/> with difficulty |
| Brushes teeth alone                                                                | <input type="checkbox"/> no<br><input type="checkbox"/> yes<br><input type="checkbox"/> with difficulty |
| Cleans him/herself                                                                 | <input type="checkbox"/> no<br><input type="checkbox"/> yes<br><input type="checkbox"/> with difficulty |
| When taking care of your own hygiene, do you fumble with the sequence of the task? | <input type="checkbox"/> no<br><input type="checkbox"/> yes                                             |
| Getting dressed                                                                    | <input type="checkbox"/> no<br><input type="checkbox"/> yes<br><input type="checkbox"/> with difficulty |
| Buttoning clothes                                                                  | <input type="checkbox"/> no<br><input type="checkbox"/> yes<br><input type="checkbox"/> with difficulty |
| Ties shoelaces                                                                     | <input type="checkbox"/> no<br><input type="checkbox"/> yes<br><input type="checkbox"/> with difficulty |

## Behavior pattern

| Shows hyperactivity                                                                                  | Has the habit of biting nails                                                                        |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> no<br><input type="checkbox"/> yes<br><input type="checkbox"/> occasionally | <input type="checkbox"/> no<br><input type="checkbox"/> yes<br><input type="checkbox"/> occasionally |

## Communication standard

|                                                                                |                                                             |
|--------------------------------------------------------------------------------|-------------------------------------------------------------|
| Does he/she show any communicative intent?                                     | <input type="checkbox"/> no<br><input type="checkbox"/> yes |
| Does he/she hold the adult's face to make him/her look in a certain direction? | <input type="checkbox"/> no<br><input type="checkbox"/> yes |
| Holds the adult's hand as if it were a tool to open/reach something?           | <input type="checkbox"/> no<br><input type="checkbox"/> yes |
| Points to indicate?                                                            | <input type="checkbox"/> no<br><input type="checkbox"/> yes |
| Answers when called by name.                                                   | <input type="checkbox"/> no<br><input type="checkbox"/> yes |
| Does he/she communicate through speech                                         | <input type="checkbox"/> no<br><input type="checkbox"/> yes |

How is the child's articulation and pronunciation? Is it difficult to understand by those who are not part of the community?

---

How is the rhythm and intonation of the child's voice (monotonous speech, too low/high)?

---

## Playing

Favorite toys and activities:

---

### Manipulation/Exploration:

Manipulates many objects/toys ☐ Yes ☐ No ☐ Occasionally

### Forms of exploration:

Gives function to objects and toys? ☐ Yes ☐ No ☐ Occasionally



## First signs of ASD

Age at which the first signs of ASD were noticed? What were they?

---

( ) Delay/peculiarity in the child's overall or expressive language development.

Give an example:

---

( ) Loss of previously acquired skills (e.g. words, social interest, motor and play skills).

Give an example:

---

( ) Problems in social behaviour (lack of interest/attachment to people and children, bizarre relationships).

Give an example:

---

( ) Delay in physical and/or motor development.

Give an example:

---

( ) Sleep disorders. Which ones?

---

( ) Eating problems (selectivity, compulsion. Which ones?

---

( ) Behavioural problems (e.g. aggression, hyperactivity, self-mutilating)

( ) Fears (consider age and situations)

( ) Presence of stereotypes in the child (motor mannerisms, repetitive play and behaviour, attachment to unusual objects for chronological age)

Which ones?

---

Other areas of concern:

---

For further reading:

---

---

This interview is linked to the research entitled in the master's program,  
part of the Guide for evaluation and pedagogical intervention of autistic students.  
Prepared by Edilma Rodrigues de Oliveira, supervised by Professor Ivanete Rosa da Silva Oliveira and Maria Aparecida Rocha Gouvêa.

**Source: adapted structured interview - Protea-R**

FORM FOR ANALYZING THE DATA COLLECTED IN THE INTERVIEW

| Aspects to be addressed       | Data collected in the interview | Family's expectations and needs |
|-------------------------------|---------------------------------|---------------------------------|
| Cognitive aspects             |                                 |                                 |
| Motor aspects                 |                                 |                                 |
| Language aspects              |                                 |                                 |
| Aspects of social interaction |                                 |                                 |
| Behavioral aspects            |                                 |                                 |
| Sensorial aspects             |                                 |                                 |
| Comments:                     |                                 |                                 |

Esta entrevista está vinculado à pesquisa intitulada no programa de mestrado, parte do Guia para intervenção pedagógica de discentes autistas.  
Elaborado por Edilma Rodrigues de Oliveira, orientado pela professora Ivanete Rosa da Silva Oliveira e Maria Aparecida Rocha Gouvêa.

Chart 2: Form for analyzing the data collected in the interview

Source: the authors .

After the interview, it is necessary to analyze the data collected and make records of specific skills such as object manipulation, language, preferred games, motor skills, and object preferences, all of which were indicated by the family during the interview.

With the data collected in the interview, it is already possible to think about structuring the environment and selecting appropriate materials for an initial evaluation with toys and games according to the initial demand.

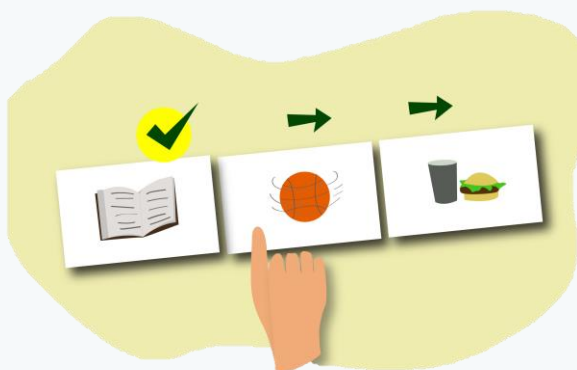
It is important to emphasize that the family's field of expectations must be considered without interference and carefully analyzed based on all the data obtained. In addition, it is essential to provide feedback on the objectives that can be designed in the Individualized Educational Plan (IEP).

Families' expectations and needs are known to be significant. However, without a semi-structured interview to analyze the demands and assess the situation, it is not possible to identify which skills are needed for the development of the student with autism and for a better performance of the professional during the first care of this child. In addition, this interview is essential to establish a rapprochement and create socio-affective relationships at this very important time.

### 3. Pedagogical intervention for stimulation and development of learning skills

In this Guide, we propose the TEACCH® model (Treatment and Education of Autistic and Related Communication Handicapped Children), which has as its main objective to help the person with autism to develop in a more functional and autonomous way in the structured model.

The TEACCH method (Treatment and Education of Autistic and Related Communication Handicapped Children), whose meaning is "Treatment and Education for Children with Autism and Related Communication Disorders", was developed in the 1960s by a doctor named Eric Schoppler and his collaborators in the Department of Psychiatry of the School of Medicine at the University of North Carolina, in the United States, and uses an assessment that takes into account the strengths and weaknesses to build an individualized program (FERNANDES, 2010, p. 28).



In this context, the structured games (Annex 1) have the pedagogical function of developing skills to adjust dissociative behavioral behaviors and stimulate the learning of people with ASD so that they can appropriate better behavioral, physical, cognitive, and social interaction functioning. In addition, these games provide the student's care in his behavioral demand, assisting him in maintaining an adjusted conduct through indications of correct answers and, consequently, favoring the improvement of self-esteem due to the possibility of successes.

Bandura (1965a, 1972) claims that

when we acquire new behaviors as a result of the imitation of conduct guidelines from models, we speak of modeling. Thus, modeling is understood as the process of acquiring behaviors from models, whether programmed or incidental. Modeling is also called the technique of modifying behavior with the use of models (BANDURA, 1965a; 1972).



Modeling promotes the ability to learn and reproduce emotions, behaviors, speech and actions, in order to transform, in ourselves, the behaviors observed in others.

Before starting the intervention, we need to pay attention to some necessary precautions for the application of the games, such as:



**Direction of development of the work** – always position the activities in front of the student. The pieces should be handled from left to right or from top to bottom, which is a preparatory position for the construction of the literacy process, since we read from left to right and we write making lines from top to bottom .

**Lecturer's language** : Speeches should always be objective and clear, one direction at a time. Avoid too many commands at the same time, as well as unnecessary or non- functional speech.

**The Environment** : anticipate possible undesirable behaviors and keep the environment always organized and the activities and materials that will be used close to the teacher and student.

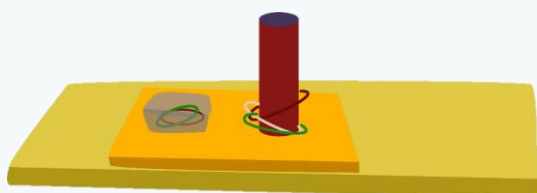
**Games:** when thinking about toys or setting up games for your student, remember that there are several possibilities to work with. So, always observe in the images: contrasts, distances / position, colors / shapes, direction / direction and details. All activities should be fun and enjoyable.

Make the most of the possibilities of the games that are always rich in learning possibilities in which your student needs.

**Learning without mistakes:** during the structured games, make the intervention and correction through the correct use of modeling, because, in this way, the activity becomes much more encouraging and stimulating for the student's development.

### 3.1 Guidance for Students

To start the game, give the learner the model of how to proceed.



1- It is important to show the pupil the objects and details (colors, shapes...).



2- Then present him or her with a model of how to do it. Example: Take an object and say the name of the color or shape. Use precise commands (take, put, fit, etc.), narrating the step-by-step actions of the activity.





3- Tell the pupil: do the same! Let's go! Now it's your turn! Come on, take the.....(referring to the object or the desired color). The learner should place (the piece or picture in the correct place) on the board or pot....



4- After carrying out the activity, the teacher can praise: well done! You have put the. **Attention:** it is important to avoid dependence on praise.



5- The process should be repeated until the objects are used up or the activity is completed. Be careful not to let the child's attention wane during the activity. Look for sound stimuli or movements to return the child's attention to the activity and complete it successfully.



Because learning is complex, there are various psychological theories to explain how and why people learn. Psychologist Albert Bandura, for example, proposed a social learning theory that suggests that observation and modeling play a key role in this process, going beyond theories that indicate that all learned behaviors occur through conditioning. Likewise, the author reports the importance of psychological influences, such as attention and memory (BANDURA, 2019; ABDULLAH, 2019; BEDOYA PASTRANA et al., 2020; MELO-DIAS; SILVA, 2019).

After observing the model and retaining the information, it is time to record the observed behaviors. Practicing the learned behavior leads to improvement and development of the skill.

The emphasis of the behaviorist worldview is on the observable and measurable behaviors of the subject, on the responses he gives to external stimuli. It is also in what happens after the emission of responses, that is, in the consequence (MOREIRA, 1999, p.14).

Finally, for the observational learning process to be successful, the student must be motivated to imitate the modeled behavior.

In this context, games are used as pedagogical tools that seek to promote not only the recognition of shapes, colors, letters and numbers, but also to stimulate visual perception and visomotor coordination, laterality, spatial notion, left-to-right progression, attention, concentration and maintenance of appropriate conduct. It is relevant to consider the data collected in the interview and the specificities and subjectivities of each autistic (Chart 3).

## Structured games for skill development and behavior regulation

### 1. Transferência simples:



**Description:** It works laterality, spatial notion, left to right progression, attention, concentration and maintenance of appropriate conduct.

### 2. Insertion:



**Description:** Encourages tactile grip, visomotor coordination, fine motor coordination, counting, associating quantity.

### 3. Overlapping



**Description:** Develops visual perception, compares, identifies, enriching vocabulary; exercises visual memory; stimulates attention and concentration; helps in the development of expressive language; enhances visual discrimination and visual understanding of objects and images; develops imagination and creativity in diferente situations.

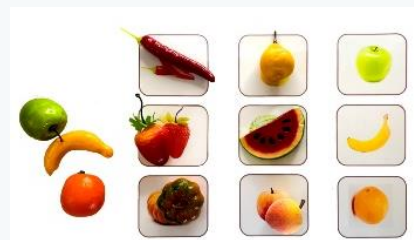
### 4. Double entry transfer:



**Description:** Develops visual perception, in order to identify differences and similarities, left to right progression, attention.

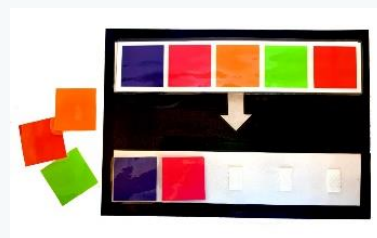
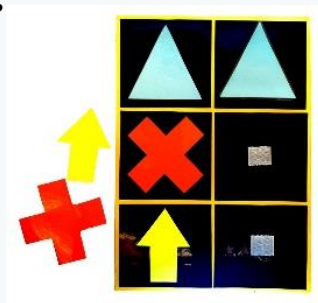
**Chart 3:** Structured games for developing skills and regulating behavior

5. Pairing with objects:



**Description:** Develops visual perception, attention, ability to compare.

6. Simple pairing



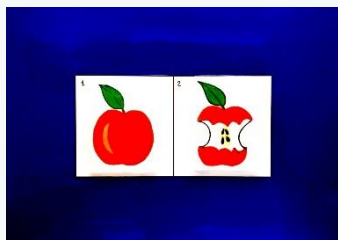
**Description:** Develops visual perception, attention, ability to compare.

7. Figure background:

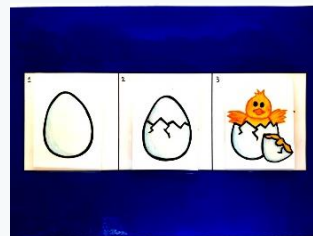


**Description:** Promotes recognition of shapes, figures, letters and numbers. Stimulates visual perception and visomotor coordination.

8. Logical sequence 2 scenes:



9. Logical sequence with 3 or more scenes:



**Description:** Organizes thinking; develops the notion of beginning, middle and end, perception, criteria ...

### 10. Simple puzzle - 2 pieces; :

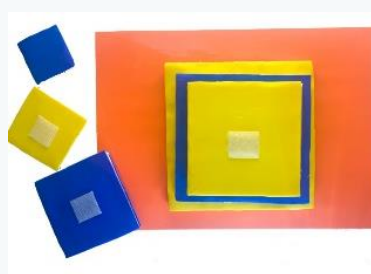
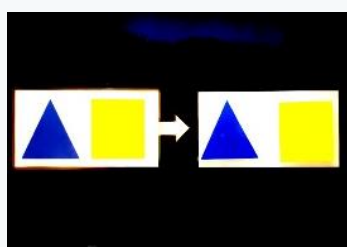


### 11. Puzzles with 3 or more pieces:



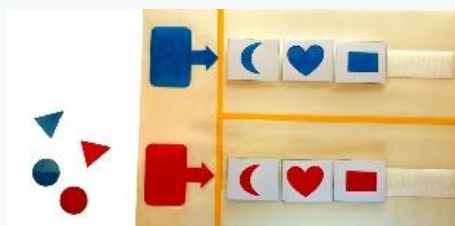
**Description:** Stimulates comparison of all parts; organizes thinking; coordinates visomanual movements.

### 12. Seriation/sequencing :



**Description:** Enables serialization or sequencing; fixes concepts of groups, attention, observation, perception of common and/or distinct characters in objects and toys.

### 13. Classification:



**Description:** Develops visual perception, hand-eye coordination, attention, ability to choose, decision; fixes mathematical concepts such as: color, size, shapes etc...

### 14. Memory:



**Description:** It develops brain functions that activate memorization; stimulates creativity; generates information files that facilitate other acquisitions.

### 15. Space and time :



**Description:** It favors the construction of the concepts of time and space through playful and fun activity, in order to promote the insertion of the student as a person, considering the time and space in which he lives.

### 16. Ideas association:



**Description:** It develops the perception of details, analysis of images, language, verbalization, notes, hypotheses and formulation of ideas.

---

This Educational Product contains a list of demonstrative videos (ANNEX 2) that provide guidance on the application of the structured games listed in Table 3.

## 3.2 Games skills intervention

Structured games are great allies in the teaching and learning of essential and necessary skills for the individual throughout his life.

We present a suggested sequence of games to develop pre-academic skills and check your student's academic skills. It should be noted that the sequence (Table 4) is suggestive and should be followed to intervene in skills due to its demanding structure. Thus avoiding unnecessary wear and tear, which can raise the level of frustration and not achieving the desirable objectives for the good performance of your student.

# Teaching record of the sequence of games

| Sequence | Structured games                       | Performs independently<br>(RA) | Performs partly with support and supervision<br>(RP) | Still not done(NR) |
|----------|----------------------------------------|--------------------------------|------------------------------------------------------|--------------------|
| 1        | Simple transfer                        |                                |                                                      |                    |
| 2        | Insertion                              |                                |                                                      |                    |
| 3        | Overlapping                            |                                |                                                      |                    |
| 4        | Double entry transfer                  |                                |                                                      |                    |
| 5        | Pairing with objects                   |                                |                                                      |                    |
| 6        | Simple pairing                         |                                |                                                      |                    |
| 7        | Background figure                      |                                |                                                      |                    |
| 8        | Logical sequence 2 scenes              |                                |                                                      |                    |
| 9        | Logical sequence with 3 or more scenes |                                |                                                      |                    |
| 10       | Simple puzzle - 2 pieces               |                                |                                                      |                    |
| 11       | Puzzle with 3 or more pieces           |                                |                                                      |                    |
| 12       | Seriation                              |                                |                                                      |                    |
| 13       | Classification                         |                                |                                                      |                    |
| 14       | Memory                                 |                                |                                                      |                    |
| 15       | Space and Time                         |                                |                                                      |                    |
| 16       | Association of ideas                   |                                |                                                      |                    |

\* Performs independently (RA). Performs partly with support and supervision (RP). Still not done (NR).

This interview is linked to the research entitled in the master's program,  
part of the Guide for evaluation and pedagogical intervention of autistic students.  
Prepared by Edilma Rodrigues de Oliveira, supervised by Professor Ivanete Rosa da Silva Oliveira and Maria Aparecida Rocha Gouvêa.

Chart 4: teaching record of the game sequence.

Source: the authors

Structured games greatly assist in regulating desirable behaviors and maintaining attention and concentration. They reduce frustration and, consequently, inappropriate behaviors. They aim not only to broaden of skills, such as maintaining them. They help with the understanding of rules, the development of communication skills, motor skills, attention, memory and analysis.

## ATTENTION

the teacher should observe whether the student has the necessary skills for the games in a sequential manner, observing the skills developed, and only then transfer them to the next game.





## 4. Final considerations

ASD is a neurodevelopmental disorder marked by brain changes that refer to language, motor skills, perception, emotions, and social interactions. The DSM-5 defines ASD as the occurrence of persistent impairments in social interaction and the presence of restricted and repetitive patterns of behaviors, interests, or activities.

It is a complex and heterogeneous disorder. In recent decades, there has been a marked increase in public awareness of ASD, which has also coincided with an increase in verified cases and improved multidisciplinary therapies for this disorder. This increase points to the need for further research to rule out detrimental factors, especially with regard to its etiology, treatments, and interventions.

To date, the exact cause of ASD is not known. Some studies have shown a link between autism and genetics. However, this is not the only explanation. Neurological development as well as environmental factors may have some impact. The field of research is still very vast at this point. In this sense, ASD is not linked to the parent-child relationship or to education. However, thanks to multidisciplinary care adapted to the needs of each person, it is possible to improve the quality of life of people with autism throughout their lives, especially if this multidisciplinary care is started early.

A person with ASD may seem to react strangely and have difficulties in their social relationships and communication because their brain processes information and perceptions differently from other people's. If people with ASD have difficulty with their verbal and non-verbal communication, it does not mean that they cannot communicate. The whole challenge of care is to build a bridge with their modes of communication: for example, using visual communication, avoiding double entendres or long sentences, directing the message, etc.

Some severe clinical forms of autism are associated with an intellectual disability that leads to significant learning difficulties. However, in most cases, brain plasticity persists. Thus, adapting the methods of Learning to adapt to the specific cognitive functioning of the ASD person enables its effectiveness.

In the school context, teachers play a relevant role in the development of children who need an intervention in skills. Therefore, their knowledge on the subject can contribute to an early and appropriate referral for the good development of this student.

That said, developing a guide for teachers with a roadmap for intervention of students with ASD in regular school is an important support to the training of teachers who deal with students with ASD using active learning methodologies, with the aim of improving the quality of the educational process for this public.

Despite the high number of students per class, resource constraints, and great pressure to which they are subjected, many teachers maintain appropriate or persistent attitudes in their way of acting. It is also essential that there be a team in the school that provides emotional support and help to teachers, providing encouragement to teachers and therefore to pupils. This attitude is often a decisive factor in improving work dynamics. Another key action is for the school (private or public) to establish in-service training policies, as updating teachers should be a priority in the educational process. In addition, it is important to work in a participatory way and to value ideas brought by the school community so that everyone feels part of the educational process.

Students with ASD, if properly stimulated, can achieve effective progress, but for this, it is necessary that the teacher knows what to do to stimulate them.

It is hoped that this guide will provide teachers with the necessary support for the education of students with ASD and provide paths for the real inclusion of these students.

## ANNEX 1

Suggestions of electronic addresses where you can find structured games for developing the potential of people with ASD..

- <https://www.decolart.com.br/>



- <http://martabistene.com.br>



- <http://universoautista.com.br/oficial/>



Similarly, suggestions for games can be found in the following book: FONSECA, Maria Elisa Granchi. **Vejo e aprendo – fundamentos do Programa Teacch®: o ensino estruturado para pessoas com autismo**. 2. ed. Ribeirão Preto, SP: Book Toy, 2016.

## ANNEX 2

One of the authors of this educational product presents in the form of videos examples of how to apply structured games in order to improve the pre-academic and academic skills of people with ASD.

### Link to the videos - learning to play

|    |                                           |                                                                                                                                                    |
|----|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 00 | Guidance                                  | <a href="https://youtu.be/tH01fnplOHU">https://youtu.be/tH01fnplOHU</a>                                                                            |
| 1  | Simple transfer                           | <a href="https://youtu.be/StGShKaTP6g">https://youtu.be/StGShKaTP6g</a>                                                                            |
| 2  | Insertion                                 | <a href="https://youtu.be/sId-EDFaTik">https://youtu.be/sId-EDFaTik</a><br><a href="https://youtu.be/hzF_kkPzg4k">https://youtu.be/hzF_kkPzg4k</a> |
| 3  | Overlapping                               | <a href="https://youtu.be/JsK2-Wgadr4">https://youtu.be/JsK2-Wgadr4</a>                                                                            |
| 4  | Double entry transfer                     | <a href="https://youtu.be/Yqec-BZazAQ">https://youtu.be/Yqec-BZazAQ</a>                                                                            |
| 5  | Pairing with objects                      | <a href="https://youtu.be/IFeq19ZkizU">https://youtu.be/IFeq19ZkizU</a><br><a href="https://youtu.be/SzMPWjuB3dE">https://youtu.be/SzMPWjuB3dE</a> |
| 6  | Simple pairing                            | <a href="https://youtu.be/3-ciAyg8m8s">https://youtu.be/3-ciAyg8m8s</a>                                                                            |
| 7  | Background figure                         | <a href="https://youtu.be/coAN2ENTpw8">https://youtu.be/coAN2ENTpw8</a>                                                                            |
| 8  | Logical sequence<br>2scenes               | <a href="https://youtu.be/K9MulVjLIDc">https://youtu.be/K9MulVjLIDc</a>                                                                            |
| 9  | Logical sequence with 3<br>or more scenes | <a href="https://youtu.be/lbGPtl_vX98">https://youtu.be/lbGPtl_vX98</a>                                                                            |
| 10 | Simple puzzle - 2 pieces                  | <a href="https://youtu.be/bykl8f9Z1_E">https://youtu.be/bykl8f9Z1_E</a><br><a href="https://youtu.be/H2NSFZvgVwl">https://youtu.be/H2NSFZvgVwl</a> |
| 11 | Puzzle with 3 or<br>morepieces            | <a href="https://youtu.be/NoWmNSjxp9M">https://youtu.be/NoWmNSjxp9M</a>                                                                            |
| 12 | Seriation                                 | <a href="https://youtu.be/CzZjpyWCCk4">https://youtu.be/CzZjpyWCCk4</a>                                                                            |
| 13 | Classification                            | <a href="https://youtu.be/Kdo57SKUP4k">https://youtu.be/Kdo57SKUP4k</a>                                                                            |
| 14 | Memory                                    | <a href="https://youtu.be/Q0kUTGLVt4s">https://youtu.be/Q0kUTGLVt4s</a>                                                                            |
| 15 | Space and Time                            | <a href="https://youtu.be/_w-rSZ72gw8">https://youtu.be/_w-rSZ72gw8</a>                                                                            |
| 16 | Association of ideas                      | <a href="https://youtu.be/yhNvIE0pGP0">https://youtu.be/yhNvIE0pGP0</a>                                                                            |

## REFERENCES

ABDULLAH, Sri Muliati. Social cognitive theory: A Bandura thought review published in 1982-2012. **Psikodimensia**, v. 18, n. 1, p. 85-100, 2019.

AMERICAN PSYCHIATRY ASSOCIATION (APA). **Diagnostic and Statistical Manual of Mental disorders - DSM-5**. 5. ed. Washington: American Psychiatric Association, 2013.

BANDURA, Albert. Applying theory for human betterment. **Perspectives on Psychological Science**, v. 14, n. 1, p. 12-15, 2019.

BANDURA, Albert. Modificação de comportamento através de procedimentos de modelação. In: KRASNER, L.; UU. MANN, L.P. (Ed.). **Pesquisas sobre modificação de comportamento**. São Paulo: Herder, 1972; Americana: 1965a.

BLANCO, R. Atenção a diversidade na sala de aula e as adaptações do currículo. In: COLL, C.; MARCHESI, A.; PALACIOS, J. **Desenvolvimento psicológico e educação: transtornos de desenvolvimento e necessidades educativas especiais**. 2. ed. Porto Alegre: Artmed; 2004. p. 290-308.

BOSA, Cleonice Alves; SALLES, Jerusa Furusa Fumagalli de(org.). **Sistema PROTEA-R de avaliação da suspeita de transtorno do Espectro Autista**. São Paulo: Vetor, 2018.

FERNANDES, Salomé. **A adequabilidade do modelo teacch para a promoção do desenvolvimento da criança com autismo**. Porto: [ed.autor], 2010. 53 p.

MELO-DIAS, Carlos; SILVA, Carlos Fernandes da. Teoria da aprendizagem social de Bandura na formação de habilidades de conversação. **Psicologia, Saúde & Doenças**, v. 20, n. 1, p. 101-113, 2019.

MANTOAN, Maria Teresa Égler. Inclusão escolar: o que é? Por quê? Como fazer? São Paulo: Summus Editorial, 2015. In: MANTOAN, Maria. Teresa E.; PIETRO, Rosângela. G. (Orgs). **Inclusão escolar: pontos e contrapontos**. São Paulo: Summus, 2006.

MOREIRA, M. A. **Teorias de Aprendizagem**. São Paulo: Editora Pedagógica e Universitária, 1999.

RIBEIRO, Sabrina Helena Bandini. **Prevalência dos transtornos invasivos do desenvolvimento no município de Atibaia: um estudo piloto**. 2007. 114 f. Dissertação (Mestrado em Psicologia) - Universidade Presbiteriana Mackenzie, São Paulo, 2007. Disponível em: <https://dspace.mackenzie.br/bitstream/handle/10899/22592/Sabrina%20Helena%20Bandini%20Ribeiro.pdf?sequence=1&isAllowed=y>. Acesso em: 12 jun. 2022.

UNITED STATES OF AMERICA. Centers for Disease Control and Prevention. **Prevalência e características do transtorno do espectro autista entre crianças de 8 anos — Autism and Development Disabilities Monitoring Network**. Washington, Estados Unidos, 2018. Disponível em: <https://www.cdc.gov/mmwr/volumes/70/ss/ss7011a1.htm>. Acesso em: 3 abr. 2022.



**Edilma Rodrigues de Oliveira** - Master's student in Health and Environmental Sciences at the University Center of Volta Redonda (UniFOA), Graduated in Psychology from Estácio de Sá University (UNESA), in Pedagogy from the Geraldo di Biasi University Center (UGB), and Specialist in Neuropsychology from the Faculty of Medicine of São José do Rio Preto (FAMEESP), in Special Education with Emphasis on TGD and High Skills (FESL), in Specialized Educational Assistance by the University of Lis (UNILINS), in Neuropsychopedagogy by the South American Center for Higher Education, Research and Extension (CENSUPEG), in Psychopedagogy by the Integrated Faculties of Jacaré Paguá (FIJ), in special education - mental disability by the Federal University of the State of Rio de Janeiro (UNIRIO). Currently, she has been a teacher in the public school system since 1995 and works with Early Childhood Education and Elementary Education. She has held the position of Educational Advisor in the Municipality of Volta Redonda-RJ since 2007. She also works as a teacher of Specialized Educational Assistance in the Municipality of Resende. Currently, she is an Educational Advisor at the Specialized Municipal School Professor Dayse Mansur da Costa Lima, which works with autistic children and adolescents. She has experience and also works with clinical care for children with autism, intellectual disabilities, and ADHD.

E-mail: [psicopedagogaedilma@gmail.com](mailto:psicopedagogaedilma@gmail.com)

ORCID: <https://orcid.org/0000-0003-4632-9090>



**Ivanete da Rosa Silva de Oliveira** - Advisor Ivanete da Rosa Silva de Oliveira, PhD in Education in the Concentration Area of Public Policies (UERJ), Master in Physical Education in the area of concentration of subjectivities and physical activity (UGF) Postgraduate degrees in Gerontology from the University Center of Volta Redonda (UniFOA), Higher Teaching from the Gama Filho University (UGF), Inclusive Psychopedagogy also from UGF, and Orientation, Supervision, and School Administration from the Redentor University Center (UniRedentor) Degree in Pedagogy from the Federal University of the State of Rio de Janeiro (UNIRIO), and a Bachelor's Degree in Physical Education from UniFOA. Teacher in the public school system since 1983, working with Early Childhood Education, elementary education, and Secondary Education, including the teaching course at the high school level. She served as an advisor to the Department of Education (Pinheiral). She has worked at UniFOA since 1997, holding the positions of Professor, Institutional Attorney, Researcher (Census), and Coordinator of the Institutional Program for Initiation to Teaching (CAPES/2013–2022). She is a member of the National Directory of Forpibid-RP, integrates the Ad Hoc Evaluators Bank of the Ministry of Education (MEC), designated by Ordinance No. 430/2018, and serves as President of the National Association of Institutional Researchers (ANPI-IES). She also works as a professor of lato and stricto sensu postgraduate courses and is currently a permanent professor of the Professional Master's Program for Teaching in Health and Environmental Sciences at UNIFOA. She is the author of articles, book chapters, and books that address Education, with an emphasis on Higher Education, Institutional Evaluation, Didactics, Teacher Training, School Physical education, and Gerontology. She was one of the authors of the Atlas of National Sport, published by the Ministry of Sport, and published her last book in 2020, entitled \*Education and Inclusive Policies: Resignifying Diversity.

e-mail: [ivanete.oliveira@foa.org.br](mailto:ivanete.oliveira@foa.org.br)

ORCID: <https://orcid.org/0000-0003-3368-718X>



**Maria Aparecida Rocha Gouvêa** - PhD in Portuguese Language from the State University of Rio de Janeiro (UERJ), She holds a degree in Letters and Pedagogy from the Faculty of Philosophy, Sciences, and Letters of Volta Redonda; a specialization in Portuguese Language from the Faculty of Philosophy, Sciences, and Letters of Volta Redonda; a master's degree in Discursive Vision from the Federal University of Rio de Janeiro; and a master's degree in Applied Linguistics from the University of Taubaté (UNITAU). She is currently a professor of the Medicine course and the Master's Degree in Teaching in Health Sciences and Environment at the University Center of Volta Redonda (UniFOA).

She also works as a section editor, member of the Editorial Committee, and Portuguese Language reviewer at Editora FOA. She has experience in the management and pedagogical areas of Higher Education and in the area of Letters, working mainly on the following topics: music, discursive ethos in the period of the military dictatorship, interdiscursivity and intertextuality, and the production of scientific texts.

E-mail : [maria.gouvea@foa.org.br](mailto:maria.gouvea@foa.org.br)

<https://orcid.org/0000-0002-5384-4616>