



# DIDACTIC-METHODOLOGICAL ADJUSTMENTS IN SURFING PRACTICE FOR PEOPLE WITH **AUTISTIC SPECTRUM DISORDERS**

ADEQUAÇÕES DIDÁTICO-METODOLÓGICAS NA PRÁTICA DO SURFE PARA PESSOAS COM TRANSTORNO DO ESPECTRO AUTISTA 🔏

AJUSTES DIDÁCTICO-METODOLÓGICOS EN LA PRÁCTICA DE SURF PARA PERSONAS CON TRASTORNOS DEL ESPECTRO AUTISTA 🙈

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Abstract: This article aims to identify the didactic-methodological adaptations used in surfing classes for people with autism spectrum disorder (ASD) at Associação Onda Azul (AOA) in Florianópolis (SC) and to propose a pedagogical strategy for teaching this sport to this population. This is a descriptive-exploratory research, with a qualitative approach to data, carried out with volunteers from the AOA, which used participant observations, semi-structured interviews and a field diary as data collection instruments. Contents related to class planning, content, adaptations, communication and transmission of content and forms of assessment were analyzed. The study presents a pedagogical proposal that goes beyond the considerations made by the volunteers and brings to light strategies to facilitate the teaching of surfing for people with ASD. Surfing presented itself as a fertile development opportunity for people with ASD and teachers must respect the individuality of students willing to make adaptations.

**Keywords:** Physical Education. Social inclusion. Autism Spectrum Disorder.

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## 1 INTRODUCTION<sup>1</sup>

People with Autistic Spectrum Disorder (ASD) have remarkable individualities, both because of the different levels of severity, as well as their specific interests, routines and rituals that ensure a feeling of safety while participating in different activities. Professionals who work with people with ASD must respect their individuality and adapt activities so that all of them can be effectively included (ROMERO, 2016; ASSOCIAÇÃO AMERICANA DE PSIQUIATRIA, 2014).

People with ASD present deficits in social interactions and it is important they move from one space to another in order to develop their relationships and interactions with the environment and individuals. In addition to deficits in social and interactional situations, studies show that people with ASD may also have motor impairment (LOURENÇO et al., 2015; SOARES; CAVALCANTE NETO, 2015).

It is auspicious to provide safe and adaptive access to the maximum possible corporal practices. Surfing, inserted in the context of adventure activities in nature (MARINHO, 2004), may also reveal itself as a possibility of passing on values and meanings, proving [itself] to be interesting for people with ASD.

Recent studies have been conducted on the concept of "surf therapy" for people with ASD, as a therapeutic alternative or complement to traditional and pharmacological interventions. Improvements were observed in social and motor skills, namely: autonomy and independence, connection with nature, self-esteem, well-being, as well as a decrease in negative symptoms related to the specifics of ASD, such as stereotypies, antisocial behaviors and anxiety (DRAKE et al., 2021; VAN DER MERWE; YARROW, 2020; BRITTON; KINDERMANN; CARLIN, 2020; ARMITANO et al. (2015).

In a literature review carried out by Stuhl and Porter (2015), social benefits resulting from the participation of people with ASD in surf camps were analyzed. Through qualitative and quantitative analyses, improvements in responsibility, engagement, well-being, resilience, self-confidence, friendship, social trust, physical health and satisfaction in living amidst nature were perceived.

In this perspective, surfing can be understood as a social, cultural, economic and sporting phenomenon (PÉREZ-GUTIÉRREZ; COBO-CORRALES, 2020). It has become an increasingly popular practice and its recognition as a competitive sport is becoming prominent as a pedagogical intervention in the field of Physical Education (RAMOS; BRASIL; GODA, 2013). Therefore, it can be understood that Physical Education teachers are potential mediators to connect people with ASD and surfing. Cavanaugh and Rademacher (2014) complement this discussion, pointing out that skills developed in surfing can increase social opportunities in inclusive learning environments.

Several methodologies are used in interventions with people with ASD, each one looking for the best results. However, there is still no consensus on which would be the most effective (ZALAQUETT et al., 2015; HO; DIAS, 2013). Intervention methods

<sup>1</sup> MORAES, Letícia Baldasso. Study on a social surfing project for people with autism spectrum disorder. 136 f. 2017. Dissertation (Masters in Physical Education) - Federal University of Santa Catarina, Florianópolis, 2017.

are still not unanimous and, therefore, research is still needed to analyze didacticmethodological strategies for teaching bodily practices to people with ASD. In a study by Maia, Bataglion and Mazo (2020), it was noticed that Physical Education teachers in schools do not see students with ASD as a problem for teaching, but as a source of challenges, which leads to a search for new didactic strategies and pedagogical information that must be constantly updated.

In this sense, this article aims to identify the didactic-methodological accommodations for teaching surfing to people with ASD at Associação Onda Azul (Blue Wave Association) in Florianópolis (SC) and present a pedagogical strategy for teaching this sport to this population.

## 2 METHODOLOGY

This study is the result of a master's dissertation (MORAES, 2017), approved by the Human Research Ethics Committee of the University of the State of Santa Catarina, under number: 1.814.571.

This is an exploratory-descriptive research, with a qualitative approach to data. Qualitative research aims to explore the universe of meanings, motives, aspirations, beliefs, values and attitudes. Analyzing a deep field, it makes relationships that cannot be quantified or reduced to the operationalization of variables (MINAYO; DESLANDES; GOMES, 2002). Qualitative research brings subject and object together, consolidating a fundamental relationship, since both are of the same nature. It also explores senses, sensations caused and the often-neglected subjectivities. Such an approach is auspicious, given the subjectivity of the development of people with ASD.

## 2.1 CONTEXT OF THE RESEARCH: ASSOCIAÇÃO ONDA AZUL (AOA)

Associação Onda Azul (AOA), headquartered in the city of Florianópolis (SC), is a non-profit organization that provides surfing lessons for people with ASD. Currently, the headquarters at which this study took place has 25 enrolled students, a management team formed by five members and a volunteer team of approximately ten people. AOA is also based on the cities of Imbituba (SC), São Sebastião (SP) and Maceió (AL).

## 2.2 RESEARCH PARTICIPANTS

Six AOA volunteers were investigated (Chart 1): four men and two women, aged between 27 and 50 years, who had attended at least five surfing lessons in the period investigated (four volunteers did not participate in this study because they did not attend the minimum of classes required). Of the volunteers interviewed, Fernanda and Júlia are also part of the management team. The other members of the management team are students' family members and were interviewed based on a different interview script to cover other issues related to the aforementioned dissertation, which are not approached in this article.

Chart 1 - Information about interviewed volunteers.

Fictitious names	Age (years old)	Profession Contact with ASD		
Davi	28	Merchant	AOA	
Eduardo	41	Pedagogical coordinator and surf instructor	AOA	
Fernanda	27	Psychologist	Graduation	
Júlia	45	Nutritionist	Friend with daughter with ASD	
Lucas	45	State highway police	Daughter with ASD	
Luís	50	Surf Instructor	AOA	

Source: Own authorship, 2021.

People with ASD were included as research participants through participant observations (Chart 2), in which the principal researcher was focused on the way the students participated. Therefore, the students were observed and did not answer the interview guide. In order to participate in the research, individuals with ASD should be enrolled in the project and family members should sign a consent form allowing the participation and release of pictures and videos taken in the surfing classes.

Chart 2 - Information about observed students.

Fictitious names	Age (years old)	Severity Level (DSM 5)	
Adrian	3	1	
Carina	24	2	
Gabriel	6	1	
Jadson	8	1	
Jeremy	12	2	
Joel	12	1	
Julian	22	3	
Matt	6	2	
Michel	8	2	
Órion	12	1	
Patrick	8	2	
Raoni	9	3	

Source: Own authorship, 2021.

## 2.3 DATA COLLECTION INSTRUMENTS

An analytical matrix of participant observation was used (MARCONI; LAKATOS, 2003) through the active participation of the main researcher in classes, providing interaction with students, volunteers and family members. This matrix provided observations on the extent of student participation in classes and possible indicators such as: interaction between students and volunteers; interaction among the students, student compliance to the volunteers' commands and perceptions of satisfaction in the participation demonstrated by students in classes. Such indicators were analyzed in the students' ways of communicating, playing and participating in the activities proposed, the students' actions when there were no activities scheduled, communicating emotions, how secure they appeared to be in the beach environment, and in spontaneous interactions.

A semi-structured interview guide, created especially for this investigation, a field diary and a recorder were also used to register the main researcher's personal considerations and thoughts.

## 2.4 DATA COLLECTION PROCESS

The observations of nine surf lessons took place over a period of four months, as the lessons are biweekly. At the end of each class, the main researcher recorded the observations, to later transcribe them.

The semi-structured interviews were carried out in different places: at the volunteers' homes and in their work environments, according to their choices. All interviews were previously scheduled and respondents signed a consent form for data disclosure. They chose fictitious names to be adopted in the study in order to preserve their identities.

### 2.5 ANALYSIS OF THE DATA

The collected data were analyzed according to the content analysis proposed by Bardin (2011), which allows characterizing and reconstructing meanings in order to characterize and identify the reality being studied. Three steps are vital in the content analysis process: pre-analysis, document analysis, treatment of results, inference and interpretation. In addition, the triangulation technique according to Triviños (1987) was applied, allowing maximum breadth in the description, explanation and understanding of the phenomenon studied, assuming that the information and data collected from sources can be compared to each other.

According to the analysis of the interviews, a posteriori categories were created as follows: planning, content of surfing lessons and adjustments to surfing lessons for people with ASD, communication and transfer of content and forms of evaluating the students. Thus, the results and discussion are presented according to these categories.

## 2.6 RELIABILITY OF THE STUDY

Reliability in this study was recognized/achieved in different ways. 1) Respondents had the option of refusing to participate in the study (SHENTON, 2004). 2) A second researcher reviewed all transcripts, themes and sub-themes to ensure the data was accurate and contemplated the collected data. 3) During the entire content analysis process, the researchers took notes and carried out reflections and rereadings. 4) In addition, the triangulation of collected data was also used as an important reliability criterion used in the study.

## **3 RESULTS AND DISCUSSION**

## 3.1 SURFING CLASS PLANNING

At AOA, class planning is based on the process of how many students will participate in the class. There is a group on WhatsApp, in which all responsible family members are included and, in the week before class a volunteer starts a confirmation list, in which the family members must sign up. After that, the management team is defined according to the number of volunteers needed for the class planned.

On class day, volunteers arrive earlier than surfers and family members to decide the best location for the class. For this purpose, it is necessary to observe the sea, ocean currents and wind, water temperature, presence of tide holes, jellyfish and the intensity of the waves. In the next step, some volunteers are responsible for setting up the circuit in the sand (composed of hoops, cones, balls, balance discs and ropes). After that, volunteers gather to talk about the surfers who will attend the class, how was their last participation, if there is anything new in their routines, among other events that could affect their behavior.

When family members and surfers start arriving, there is a welcome from the team, a hang loose greeting, handing over the wetsuits and, if possible, they talk to the surfer to find out how was his/her day. As volunteer Fernanda comments, each student's lesson plan is different from the other:

> There is a moment of arrival, preparation, putting the wetsuit on, greeting everyone. Knowing the expectations, trying to find out about the mood of each one. Ah, so-and-so is excited, so-and-so is stressed... There you can already feel the energy of each one on that day, because everyone has good and bad days. (Fernanda).

After welcoming the students and handing over wetsuits, surfers, family members and volunteers gather for a warm-up. It consists of racing from one cone to another, then forming a circle where they stretch and practice some climbing positions on the board guided by physical educational professional. It is a moment of relaxation involving everyone therein.

After the stretch, the volunteers will perform the following tasks, as previously assigned: some will coordinate the sand circuit, some will go to the board they were assigned and others will organize the students or welcome and talk to family members who stay in the sand.

The order of entry of students into the sea varies according to their willingness and energy. For Marcelo, there is no ruleset for the entry or permanence of surfers in the sea:

> We try to put first in the water those who are more anxious, some who are practically entering the water, and move on from there. When the others see those who have already entered the water, they begin to perk up. There are some who do not go, others stay just a little. Anyone who has already surfed at the beginning of class and is willing to do it again is welcome. There is not a very strict rule about how many waves each one may catch or how long they may stay in water. (Marcelo)

The duration of the class is between an hour and an hour and a half. When the activities in the sea and in the sand are completed, all surfers, family members and volunteers gather to take a picture, in which the boards are placed upright and everyone poses around them. This moment symbolizes the end of the class. For Van der Merwe and Yarrow (2020), people with ASD should follow a routine to improve their mental processes and better respond to unexpected situations. Taking the picture at the end of the class is very significant, since some students just relax and eat their snacks after the ritual is completed, as so family members only leave after the picture is taken.

In each of the classes observed, it was possible to notice differences in the participation of surfers and volunteers. As it is a non-profit association, volunteers are not remunerated and sometimes there is a lack of commitment to schedules and assignments. This situation makes planning classes more difficult, since it is not possible to predict how many volunteers will be present to share tasks in welcoming the students and family members, in the sand and in the sea.

As in lesson planning, the contents covered in classes are important elements in the process of didactic-pedagogical proposals adapted for teaching surfing to people with ASD, as explained below.

## 3.2 SURFING CLASS CONTENT

The volunteers' perception of the contents taught in the classes involves: social inclusion, autonomy, desensitization, interaction with the environment, motor development and well-being.

Social inclusion was remembered in several ways by volunteers: both through the relationships among the students, as well as relationships between students and volunteers. Julia says that she sees AOA as a family where everyone helps and welcomes each other.

> We encourage socialization. We are always in groups. There are both the socialization of children with their own families, and socialization with other children, families with other families. We are a group, more than that, I would say we are a family. One moment a student's mother is another mother's psychologist, one moment a mother is taking care of another mother's child at the beach and so on. (Julia).

Social inclusion can also be seen in the fact that the classes take place at the beach, where different people are present, not just those from AOA. In the observations, some family members told that they had stopped going to the beach because of the barriers the environment brought, such as excessive stimuli, the difficulty of some students with the different textures that the sand and sea provided and people who were at the beach staring at the individualities that ASD may present, such as lack of language, excessive screaming, stereotyped movements, etc.

It was observed that, as students became more comfortable in the environment. they began to spend more time apart from their parents and to explore the environment, as well as to interact with their peers, volunteers and other students' families. Classes take place in a relaxed way, full of moments of respect for the individuality and preferences of each one.

It is essential that students become less dependent on their relationship with their parents. For me, they feel freer when they are at the beach. They can connect to other people and trust them as they trust instructors. I felt like I ended up earning the trust of some of them. I think this is one of the main features of the project. (Eduardo).

As it can be seen in Eduardo's report, some volunteers mentioned the importance of students' autonomy from their parents, thinking of the class time as a possibility for the student to feel free. In the classes observed, it was possible to notice how happy the students were when playing with each other at the water's edge and running free along the beach.

Desensitization was another content mentioned by the volunteers, understood by them as a way of working the different feelings students present when in contact with the unpredictability of the elements of nature and with the universe of different experiences provided by them.

> We work to desensitize students, placing them in an open environment, full of sensory, visual and auditory stimuli. There are sunny days, rainy days, hot days, cold days. We experience all kinds of natural adversities, as we work directly with nature. Sometimes the sea is calmer, sometimes the sea is rougher. We work intensively on sensory desensitization with these children and teenagers at the beach. (Fernanda).

Desensitization, in this case, can be understood both as a way for people with ASD to experience different stimuli, sensations and textures provided by the beach environment and as a way of dealing with anxiety and difficulties in the sensory system that some of them present. Such situation was observed in a study on "surf therapy", in which people with ASD showed a better regulation in their sensory system, resulting in an easier exploration of different environments and situations (VAN DER MERWE; YARROW, 2020).

Volunteers come up with ideas of contents more related to social, psychological and physical skills than specific skills for surfing. Ramos, Brasil and Goda (2013) state that surf coaches considered the technical aspects of the sport, such as basic and advanced maneuvers, where the evolution was based on the complexity of the maneuvers and/or technical development of the movements necessary for standing up on a surfboard. As they are people with ASD, we believe that in this study the volunteers probably think of ways of development other than specific surfing techniques, in order to help students to succeed in different areas of their lives.

However, evolutions in the students' motor development were also observed, corroborating the study by Armitano et al. (2015), who analyzed the physiological impact of surfing lessons on people with different disabilities. Improvements were found in the strength of the muscles of the upper limbs of the body and in the cardiorespiratory endurance of the participants.

The students' motor development was noticed by AOA volunteers who shared stories about personal evolution of some of them. Davi told the story about Jadson, who initially did not even want to wet his foot in the water and, in the last classes observed, he was sliding on the waves in a sitting position. In the observations, it was noticed that Davi was the volunteer who came closest to Jadson in the classes. He evolved from activities with the board in the sand to playing in the water. Then they started some activities with the board at the water's edge, until, in the seventh class observed, the student slid on the waves for the first time with Davi pushing him and following him on the wave. In the ninth class, Davi pushed Jadson into the wave and he slid by himself until another volunteer held the board when he was reaching the sand.

In the aforementioned situation, it is possible to understand the importance of the volunteer as a mediator in the student's interaction with the beach environment, especially with the sea. Chicon, Silva de Sá and Fontes (2013) emphasize that the teacher needs to provoke learning and playful moments in aquatic environment in a safe and adaptive way for people with ASD. The authors claim that, although the literature highlights evidence on the interaction deficits of people with ASD, it is possible to notice that students become attached to teachers, and such affection provides an excellent path for learning.

One of the contents also mentioned by volunteers for students' learning and evolution concerns to well-being linked to the sensations provided by the practice of surfing. Luis states that surfing can provide unparalleled moments of relaxation, well-being, fulfillment and that he notices that students feel that in their own bodies. He believes that surfing can bring both immediate and lasting benefits. In the same perspective, Fernanda and Julia referred to surfing as a kind of alternative therapy, helping students' emotional control.

> The coolest content for me is the students' emotional issue. You need to be there to know how it feels. That agitated child, refusing to enter the water, and the moment she "catches" that wave, a smile appears on that face replacing the agitation. Its inexplicable, an alternative therapy. (Fernanda).

In addition to the contents covered by the AOA surf classes, understanding how these contents are assimilated by students is of major importance. The students' individualities are remarkable, and, therefore, the accommodations made to facilitate the understanding and evolution of people with ASD in surfing lessons were analyzed.

## 3.3 ACCOMODATIONS IN SURFING CLASSES FOR PEOPLE WITH ASD

Teachers should understand that each individual with ASD has their particularities and requires different teaching strategies, capable of meeting their needs and stimulating their potential (MAIA; BATAGLION; MAZO, 2020). Luis says that, before teaching at AOA, he has never had contact with a person with ASD and that he was scared before the first class. He recalls the heavy meaning that the ASD carried in the past, in which it was understood that people with this disorder were nearly unreachable. He says that he was surprised that the classes were much easier than he thought.

There is a "nous" among the respondents that teaching an individual with ASD is different from teaching a neurotypical child, but at the same time, there are similarities. Rafael mentions some accommodations such as looking directly into their eyes, exploring the touch aspect, speaking more slowly, but he finishes saying that "apart from that, it's basically like teaching anyone else".

On the other hand, Eduardo, the other surf instructor, reported different adaptation situations. It is worth noting that he is a pedagogical coordinator in a distance education college and it may affect his perceptions about the accommodations needed for a more humanized and affective teaching.

> The first accommodation is not forcing the student to perform any movement. In a regular class, we encourage the student to stand up. For me, surfing is about riding the wave, no matter if he is lying down, sitting or standing. That was the adaptation I made. I try to feel the student, if he is enjoying it, if he is happy, and I usually plan my class accordingly. (Eduardo).

Patience was a recurrent word in the respondents' speech, as a way of respecting each student's time. In the observations, it was impressive to notice the different individualities of each student. Each one has its own way of bonding with the volunteers, with other students, as well as connecting with the beach environment.

> Sometimes there are some instructors who do not have much experience in interacting with children and believe that just by talking, the child will understand and absorb. You have to take it calmly, being careful not to touch the child too much, not talk loudly. You may not rush the child to do what you want her/him to do. You have to let the child take pleasure in it. It's like a bird, you can hold it neither too tight nor too loose. (Lucas).

Lucas, in addition to volunteering, is also Carina's father, one of AOA students. He is more knowledgeable about ASD than most volunteers. In the aforementioned excerpt, he reports the attitudes of one of the surf instructors. It was observed in the classes that the abovementioned instructor was not very patient or calm with the students. He usually taught students who did not have such severe ASD features, or another volunteer was paired with him, sitting on the board with the student, while he was on the back of the board.

The instructor in question was also interviewed. When asked about the accommodations he made in the classes at AOA, he said that he did not have to change a lot of "things". He emphasized that he was a little more careful when it comes to safety, mainly because he had volunteers and family members who were distracted by the sea. In his own words: "For me, it's the same as if I were teaching any child, in any class" (Luis).

On the other hand, when asked about the adaptations, Fernanda stated:

For me, as I already have contact with children with autism, in a way, it is already directed with the purest thought, looking for a truer exchange, without judgments and expectations. Because you know that child, that teenager does not care for social judgments. For me this is a truer exchange. (Fernanda).

This volunteer interacted the most with students, from calling them to go into the water, to sitting on the board and guiding the ride on the waves with a child on her lap. Over time, Fernanda developed techniques for such a maneuver. Initially, she used to sit with her legs crossed and the child on her lap. After a few lessons, she started to stand on her knees, with her hands on the child's waist and, at the right time to ride the wave, she would lift the child, who would stand up to the water's edge.

Analyzing the accommodations made in surfing classes, it is clear that volunteers have different ways of interacting with students as well as different ways of perceiving the specifics of ASD. For a better understanding of such forms of interaction, knowledge regarding communication and transfer of contents by volunteers was deepened.

## 3.4 COMMUNICATION AND TRANSFER OF CONTENT

There are particularities in ASD in the way each one expresses him/ herself. Some may use oral communication, others may use verbal communication (alternative methodologies for communication such as LIBRAS) and for some it may be difficult to express themselves. Therefore, it is important to understand the forms of communication and transfer of content that volunteers use in AOA classes. Julia confirmed how relevant this is through her experiences:

> Contact with students with ASD is different. Communication is different. A lot of visual communication is needed to get their attention, and often, even though we try hard, we can't get their attention. In each class, we try to learn a little more to know the peculiarities of each one. How I may deal with this one, how I may to deal with that student. (Julia).

When asked about the forms of communication with students, Fernanda highlighted that she communicates using the whole body and shared some stories about situations experienced in class, describing unimaginable positions she had to pose in order to communicate with some students.

> We communicate in a specific form with each child. With a child, you know that verbal works better, with others I communicate in sign language. There are children whose body and facial expressions are very strong because they are children who already are more efficient in visual communication. We have to trust our gut with each child. We have different forms of communication. We try to explore different possibilities with each child. (Fernanda).

Eduardo said that communicating with students was the hardest part, requiring him to learn how to deal with each one of them. He gives an example one of the students, Joel: if Eduardo hit the board with his hand and the student hit the board, it meant he was enjoying it. This is corroborated by the study by Chicon, Silva de Sá and Fontes (2013), which describes that the teacher must be prepared to read the students' forms of bodily expression and their demands, in order to be an effective mediator in overcoming the student's difficulties and developing their potential.

The volunteers shared the opinion that eye contact with the students was important. For good interaction, they first made eye contact, at the same height as the student, if necessary. This situation corroborates the study by Cavanaugh and Rademacher (2014) by pointing out the importance of visual contact between teachers and students for a better understanding of the activities to be developed. In addition to eye contact, volunteers cited the need for demonstrations.

Ramos, Brasil and Goda (2013) discuss the importance of complementing verbal intervention and demonstration in teaching surfing. In verbal intervention, verbal communication would be the dominant process, in order to explain the goal and how to accomplish learning tasks. In the demonstration, visual communication would prevail, in a representative way that the teacher presents to the student for reproduction. In the case of people with ASD, reinforcement in visual stimuli is important, such as trying to focus on eye contact, followed by a demonstration.

One of the ways to analyze if communication is being effective and the contents are being transmitted is by evaluating the improvement of students. Thus, the forms of assessing students are essential for implementing the pedagogical proposal.

## 3.5 ASSESSEMENT OF STUDENTS

According to Ho and Dias (2013), students must be assessed individually and periodically in order to organize and plan interventions, to analyze whether the methods are working and in what way. As each individual with ASD has his/her own particularities (just as people with the same disability are different from each other) (TALEPOROS; MACGABE, 2002), it is important that each one is individually assessed, according to their own limits and potentials.

Considering the respondents' statements, it was possible to notice that the main result expected for the students is to have fun. Providing playful moments becomes more important than turning students into athletes, allowing them to have fun safely. According to the volunteers' reports, the project can be characterized as a pursuit of leisure instead of surfing as a competitive sport.

> I hope they have fun, that the students are happy at that moment, in that environment, with that activity. Then I look for an improvement in the practice of surfing, in well-being, in socialization, in communication. Those would be secondary goals. The main thing is to provide fun moments. (Fernanda).

As Fernanda emphasizes, the expected result with the lessons is to provide leisure and playful moments for students. For Melo (2002), one of the forums for categorizing leisure would be leisure as a social need and reason for public interventions. This situation is exemplified in the case of people with ASD who have limited leisure options and should try to enhance the opportunities for experiencing. presenting different possibilities for pleasure and fun.

The students' happiness while participating in the surf lessons was remarkable. Not only when they were in the water in contact with the board, but also in moments in the sand, in spontaneous games, in the interactions initiated by themselves with other students.

People with ASD tend to have problems in interacting and playing with peers at the same age (BOSA, 2006), but in surfing classes, even if they did not communicate verbally with other students, they interacted and played using their bodies. They felt they belonged to a group, where those around them did not judge them and interacted in a way that was familiar to them.

According to Maia, Bataglion and Mazo (2020), it is necessary that goals and methods are individualized, according to the needs of each person with ASD, in order to provide classes that make sense for students in the teaching-learning process. It was possible to notice that most volunteers do not have an explicit or pre-established way of evaluating the students' evolution. When questioned, they began to recall moments and situations with specific students, and it can be inferred that they began

to structure mental images about the student's improvement in social and motor situations, but a specific evaluation process was not identified.

The AOA technical team began to build an assessment table for each student, according to daily classroom situations, as well as motor assessment. However, volunteers had not yet committed to filling out such tables.

A more coherent form of assessment comprises the evolution of the child's potentials from the beginning up to the present moment (ROMERO, 2016). It is necessary to be attentive to each step of their journey, providing challenges in appropriate moments and words of encouragement, among others. Professionals must be in constant contact with the family to also understand specific reactions of the students.

This study highlights the need for an assessment system that is more effective and easier to be implemented. An assessment tool may be built together, taking into account the volunteers' opinions about what they consider important in the students' improvement.

Inspired by the discussions initiated, which provided opportunities to identify the didactic-methodological accommodations made in surfing lessons for people with ASD at AOA, Chart 3 presents a pedagogical proposal, with a view to deepening the study on the subject.

Chart 3 – Pedagogical Proposal for teaching surfing to people with ASD.

Planning	Contents	Accomodations	Communication	Assessment
Confirmation of how many studentes will participate	Social Inclusion	Patience with students' different times	Body language	It is individualized
Creating an activity routine	Autonomy	Respect for individualities	Eye contact at the same height as the student	It must evolve according to the potential of students
Analysis of beach and sea conditions	Desensitization	Looking directly into the eyes of students	Demonstration of activities	Requires implementation of challenges
Previous organization of materials	Interaction with the enviroment	Speak slower	If necessary, use pounding	It advocates family involvement
Division of tasks among volunteers	Motor development	Perceive the student's mood	Respect the specifics of each student	Must be compromised
Scheduled times for the beginning, middle and end of the class	Well-being	Don't rush the activities	Enhanced facial expression	Must be feasible

Source: Own authorship, 2021.

In this way, the pedagogical proposal presented surpasses what the volunteers addressed in the surfing classes. It also portrayed the attentive look of the main researcher of this study and her perception of children with ASD. The proposal in question, based on the triangulation of data collected in this study, aims at making easier the contact between professionals from different areas and people with ASD in a simplified and accessible way.

#### **4 FINAL CONSIDERATIONS**

Brazil is experiencing a social, economic and cultural crisis that affects all layers of population in different levels, directly impacting on formal and informal education. It is of paramount importance to research and analyze educational initiatives beyond traditional teaching environments, providing opportunities for change beyond the classroom walls, transforming individuals into critical thinkers aware of their rights and duties in society.

In this study, the didactic-methodological adaptations made in surfing classes for people with ASD were analyzed and, from a particular context, a pedagogical proposal was suggested. It is related to planning, content, accommodations, communication and evaluation and aimed at helping professionals who work with surfing and/or with people with ASD. Such project transcended the data collected, increasing the possibilities of the study.

The subjects analyzed herein are not exhausted. All efforts to increase the understanding about the didactic-methodological accommodations for teaching surfing for people with ASD can build up knowledge and create opportunities to broaden the perspective of the phenomenon studied both in academic field and in everyday life.

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Resumo: Este artigo objetiva identificar as adequações didático-metodológicas utilizadas nas aulas de surfe para pessoas com transtorno do espectro autista (TEA) na Associação Onda Azul (AOA) em Florianópolis (SC) e propor uma estratégia pedagógica para o ensino deste esporte para esta população. Trata-se de uma pesquisa descritivo-exploratória, com abordagem qualitativa dos dados, realizada com voluntários da AOA, a qual utilizou como instrumentos de coleta de dados observações participantes, entrevistas semiestruturadas e diário de campo. Foram analisados conteúdos referentes ao planejamento das aulas, ao conteúdo, às adaptações, à comunicação e transmissão de conteúdo e às formas de avaliação. O estudo apresenta uma proposta pedagógica que extrapola as considerações feitas pelos voluntários e traz à luz estratégias para facilitar o ensino do surfe para pessoas com TEA. O surfe apresentou-se como uma fértil oportunidade de desenvolvimento para pessoas com TEA e os professores devem respeitar as individualidades dos alunos dispostos a realizar adaptações.

Palavras chave: Educação Física. Inclusão social. Transtorno do Espectro Autista.

Resumen: Este artículo tiene como objetivo identificar las adaptaciones didácticometodológicas utilizadas en las clases de surf para personas con trastorno del espectro autista (TEA) en la Associação Onda Azul (AOA) en Florianópolis (SC) y proponer una estrategia pedagógica para la enseñanza de este deporte a esta población. Se trata de una investigación descriptiva-exploratoria, con abordaje cualitativo de los datos, realizada con voluntarios de la AOA, que utilizó observaciones de los participantes, entrevistas semiestructuradas y un diario de campo como instrumentos de recolección de datos. Se analizaron contenidos relacionados con la planificación de la clase, contenidos, adaptaciones, comunicación y transmisión de contenidos y formas de evaluación. El estudio presenta una propuesta pedagógica que va más allá de las consideraciones realizadas por los voluntarios y saca a la luz estrategias para facilitar la enseñanza del surf a personas con TEA. El surf se presentó como una oportunidad de desarrollo fértil para las personas con TEA y los profesores deben respetar la individualidad de los estudiantes dispuestos a hacer adaptaciones.

Palabras clave: Educación Física. Inclusión social. Trastorno del espectro autista.



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## **CONFLICT OF INTERESTS**

The authors have declared that this work involves no conflict of interest.

## **AUTHORS' CONTRIBUTIONS**

Letícia Baldasso Moraes: Conceptualization, data curation, formal analysis, project administration, research, methodology, writing.

Alcyane Marinho: Conceptualization, supervision, methodology, validation, writing.

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#### **RESEARCH ETHICS**

The research project was submitted and approved by the Ethics Research Committee with Human Beings of the State University of Santa Catarina, n. protocol, 1,814,571.

## **HOW TO CITE**

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## **EDITORIAL RESPONSIBILITY**

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