# JUAN, A CHILD WITH ASPERGER'S SYNDROME: A CASE STUDY OF A GOOD PRACTICE OF EDUCATIONAL INCLUSION THROUGH COOPERATIVE LEARNING<sup>1</sup>

Juan, uma Criança com Síndrome de Asperger: Estudo de Caso de uma Boa Prática de Inclusão Educacional por meio da Aprendizagem Cooperativa

> Felipe Trillo ALONSO<sup>2</sup> Ana Parada GAÑETE<sup>3</sup> Abraham BERNÁRDEZ-GÓMEZ<sup>4</sup>

ABSTRACT: Attention to diversity to make inclusive education effective is the conceptual framework in which we present this case study on a student with Asperger's Syndrome (AS), whose name is Juan. The purpose of this paper is to identify, describe, analyze, interpret, understand and make visible a good practice of educational inclusion with a child with Asperger's Syndrome based on cooperative learning. Thus, through a qualitative methodology with a single case study, we analyze an educational inclusion experience reported by children themselves, and this represents a cooperative learning experience. Meeting Juan's specific educational support needs (NEAE) to facilitate his inclusion is the backbone of this work.

KEYWORD: Special Education. Asperger's. Collaborative learning. Inclusive practices.

RESUMO: A atenção à diversidade para tornar a educação inclusiva eficaz é o marco teórico conceitual no qual se apresenta este trabalho sobre um aluno com Síndrome de Asperger (SA), que se chama Juan. O objetivo deste artigo é identificar, descrever, analisar, interpretar, compreender e tornar visível uma boa prática de inclusão educacional com uma criança com Síndrome de Asperger baseada na aprendizagem cooperativa. Assim, por meio de uma metodologia qualitativa com um estudo de caso único, analisa-se uma experiência de inclusão educacional relatada pelas próprias crianças, e isso representa uma experiência de aprendizagem cooperativa. Atender às necessidades específicas de apoio educacional (NEAE) de Juan para facilitar sua inclusão é a espinha dorsal deste trabalho.

PALAVRAS-CHAVE: Educação Especial. Asperger. Aprendizagem colaborativa. Práticas inclusivas.

#### 1 Introduction

Messiou (2006) argues that listening to children about inclusion in schools is a recommendation that must be followed to ensure success in relation to inclusion in these spaces. Therefore, this research, which aims to contribute to the improvement of educational practice, is done through the collection and evaluation of children's voices.

In fact, it was through the analysis of the perceptions of the classmates of a classroom that a good practice of educational inclusion for a child with Asperger's Syndrome was

<sup>1</sup> http://dx.doi.org/10.1590/S1413-65382519000100006

<sup>&</sup>lt;sup>2</sup> Department of Pedagogy and Didactics - University of Santiago de Compostela, Santiago de Compostela, Spain. felipe.trillo@

ORCID https://orcid.org/0000-0002-0107-7275

<sup>&</sup>lt;sup>3</sup> Department of Pedagogy and Didactics - University of Santiago de Compostela, Santiago de Compostela, Spain. ana.parada@

ORCID https://orcid.org/0000-0001-5051-063X

<sup>&</sup>lt;sup>4</sup>Department of Didactics and School Organization - University of Murcia, Murcia, Spain. abraham.bernardez@um.es.

ORCID https://orcid.org/0000-0003-1862-5554

discovered through a cooperative learning experience; in such a way that knowing, explaining and understanding this experience is the objective of this work. Thus, we point out as objectives of this work:

# a. General objective:

Identify, describe, analyze, interpret, understand and make visible a good practice of
educational inclusion with a child with Asperger's Syndrome based on cooperative
learning.

# b. Specific objectives:

- Identify the characteristics of Asperger's Syndrome that can assume disruptive behavior patterns in the context of the classroom and the School Center.
- Describe the perceptions of classmates in the classroom of a child with Asperger's Syndrome, as indicators of good practices of educational inclusion.
- Analyze how the group of classmates of a child with Asperger's Syndrome respond to situations generated by the disruptive patterns of their behavior.
- Interpret and understand the strategies to (re)lead the situation, as indicators of good practices of educational inclusion.

For that, this work was structured into five sections that address consecutively: the main characteristics of Asperger's Syndrome, cooperative learning and good practices, as well as the methodology used in this study, the main results and conclusions.

## 1.1 ASPERGER'S SYNDROME: A CONCEPTUAL APPROACH

Asperger's Syndrome is included in what is known as Autism Spectrum Disorder (ASD) along with childhood autism, Childhood Disintegrative Disorder and Global Developmental Disorder - Not Otherwise Specified (DSM-5, American Psychiatric Association [APA], 2016). It was first described by Hans Asperger, in 1944, and coined by Lorna Wing in 1981 (Wing, 1981). People with Asperger's Syndrome have a number of common characteristics and are identified in three specific functional domains that are qualitatively altered (APA, 2000). They are known as the Wing's Triad (Wing & Gould, 1979): (1) Ability of social relation; (2) Communication skills; (3) Mental and behavioral flexibility.

There are many descriptions in literature (Tantam, Monaghan, Nicholson, & Stirling, 1989; Szatmari, 2006a, 2006b; APA, 2016); however, it is understood that the one of Rivière (2001, as cited in Pérez, Pascual, Prudencio, Navarro, & Comí, 2006) is the one that contributes most with details to our research, since it concretely clarifies each one of the characteristics of the Asperger's Syndrome:

- Qualitative disorder of the relationship: lack of empathy, lack of sensitivity to social stimuli, little emotional reciprocity and incompatibility between behavior and social context.
- Inflexibility in behavior: dominant and ritual interests, sometimes extreme in nature.

- Speech problems: vocabulary not adapted to the age or environment in which he/she is found and difficulty interpreting non-literal statements.
- Emotional and motor expression changes: lack of motor coordination and difficulties in the use of gestures.
- Common ability of impersonal intelligence of singular abilities that appear in the limited areas, which stands out when with his/her companions.

# 1.2 A Wing's triad in the educational context: difficulties that are generated

According to Attwood (2002), Pérez et al. (2006) and González Navarro (2012), it was found that the first domain, social relation capacity, shows changes in the processes of social cognition in which naive behavior prevails, behaviors not adjusted to social convention or to immature reasoning. In practice, according to a study conducted by Portway and Johnson (2003, as cited in González Navarro, 2012), which brings statements from students with Asperger's Syndrome, this translates into:

"I remember feeling uncomfortable around people. I realized that it was not appropriate. It was a vague sense of discomfort that grew as I grew older".

"I feel sad and distressed because I don't have friends at school. It makes me suffer".

This refers to feelings of loneliness, difference and isolation.

When referring to the domain of language and communication, it is recognized that, despite being able to construct sentences correctly, Juan presents difficulties in the use of language. This is demonstrated by the use of elaborate vocabulary, difficulty in knowing what to say or respecting the order of the conversations, literal understanding of the language or restrictions on the expression of emotions.

Finally, in relation to the domain whose characteristic pattern is the mental and behavioral flexibility, it is possible to emphasize the predominance of a rigid and dichotomous reasoning, often limited to topics of interest. In addition, different rituals and perfectionist attitudes can be manifested in different tasks. In the study done by Portway and Johnson (2003, as cited in González Navarro, 2012), a teenager with Asperger's Syndrome explains as follows:

"I don't understand what happens to the rules. I say the rules are made to be followed, but others say the rules are made to be broken and changed. I never break any rules. Not even the orthographic ones. I never make a mistake, not even when I send messages on my cell phone".

Therefore, the domains affected by the study object discussed here affect in a special way the relationship with their peers, which undoubtedly affects the proper educational use of their school experience. This fact indicates the need to respond to the objectives established in this investigation.

#### 1.3 GOOD PRACTICES AND COOPERATIVE LEARNING

For a long time, educational research in general has evolved in quality in absolute terms, based on the identification and visibility of good practices. Thus, from the definition of deductive and normative, habitual in Pedagogy (of a normative nature, in itself), the area moves towards a much more inductive and situated perspective (Zabalza, 2012).

In this paper, in relation to the term "good practices", it is meant that they are examples of successful procedures and behaviors (Anne, 2003), but, according to Zabalza (2012), it is important to highlight that no good practice reaches the attribution of value in the summary: the idea of universal practices is not good; at least in education. Good practices are always in a context and under certain conditions.

Working from the perspective of good practices in inclusive education is, if possible, given greater meaning by understanding that it corresponds to "a process that has no end" (Simón & Echeíta, 2012, p. 34), which relies on concrete cases that have succeeded and would probably be "transferred to other situations and act as points of reference and/or contrast for those who wish to advance in the improvement of Education" (Zabalza, 2012, p. 20). Thus, this paper tries to explain what is considered to be a good practice of educational inclusion through cooperative learning; that is, what leads students to count on each other, to collaborate, to help each other throughout the development of everyday activities (Pujolàs Maset, 2012). This favors and generates appropriate dynamics to better address the "daily tasks" of classroom life (Jackson, 1992).

# Pujolàs Maset (2009, p. 8) defines cooperative learning as

a way of structuring the class, so that the teacher is not the only one who "teaches", but also the students in small cooperative teams are able to "teach" each other, cooperate and help one another when it comes to learning [...]. Cooperative learning has great advantages: it improves learning for all students, not only content related to attitudes, values and norms, but also other content (both concepts and procedures). And not just the students who have the most problems learning, but also those who are more abled to learn. It also facilitates the active participation of all students in the teaching and learning process, emphasizing their role in this process. This undoubtedly contributes to the creation of a classroom environment that is much more conducive to learning for all students. On the other hand, it facilitates the integration and interaction of students with difficulty with those who learn easily, so that among them there is a stronger and higher quality relationship.

Following this author, for us, cooperative learning involves the restructuring of classroom space, incorporating new teaching methodologies by the teacher and, mainly, a change of philosophy in teaching-learning characterized by the horizontality between teacher-student, tutoring peer education and personalization. It also involves a classroom organization that encourages teamwork, which favors educational inclusion and the universal design of learning. Thus, a pedagogy in which the school must adapt to the students, not the other way around.

Interest and relevance of cooperative learning - understood as an intentional and systematic strategy, that is, as a methodology, but also as a spontaneously generated experience among peers and that, in one way or another, is for all students to achieve cognitive and social

skills to optimize their development - the extensive literature explains on the subject: Domingo (2008); Duran and Blanch (2007); Fernández-Río (2006); González, Cecchini, Fernández-Río, and Méndez-Giménez (2008); Langher, Ricci, Propersi, Glumbic, and Caputo (2016); Lobato Fraile (1997); Lorente and Joven (2009); Méndez-García (2007); Palomares Montero and Chisvert Tarazona (2016); Pujolàs Maset (2012); Vernetta Santana, López Bedoya, Gutierrez-Sanchez and Ariza (2014). In the light of this approach, this experience corresponds to what Pujolàs Maset (2012) says, although inclusive schools and classrooms, on the one hand, and cooperative learning, on the other, are two different concepts, in practice they are intimately related because:

- a) The only way to serve different students in the same class, as required by the choice of an inclusive school, is to introduce into it a cooperative learning structure, to the detriment of the individualistic or competitive structure, even dominant in the classroom today.
- b) There cannot be adequate cooperation with the development of solidarity and respect for the differences that cooperation implies if previously those who were different were excluded from a classroom if the classroom was not inclusive.

#### 2 METHODOLOGY

According to the studies of Sandín Esteban (2003), this work adopts a qualitative research methodology (Báez & Pérez de Tudela, 2007; Bisquerra, 2014; Taylor & Bogdan, 1990; Tójar Hurtado, 2006) of ethnographic tradition, since "it aims to provide valuable descriptive data of the contexts, activities and beliefs of the participants in the educational scenarios" (Goetz & Lecompte, 1988, p. 41). It is therefore about "reconstituting analytically intact cultural settings and groups" (Goetz & Lecompte, 1988, p. 28). In this way, what is presented is a unique study "of the culture of a community, or of one of its fundamental aspects, from the perspective of its global comprehension" (Aguirre, 1995, p. 3).

In this sense, the method used to gather information was the case study (Macdonald & Walker, 1975; Merriam, 1998, Muñoz & Muñoz, 2001, Simons, 2011, Stake, 1998; Yin, 1989), understood as a process of systematic and in-depth research on the particularity and complexity of a singular and contemporary experience in its actual context. Specifically, a single case study was conducted whose unit of analysis are the peers of the child with Asperger's Syndrome.

Juan is enrolled in a Public Education Center located in a rural area. He is currently enrolled in the 6th grade of Childhood Education. He has never failed any courses. His academic performance is good. He belongs to a family of average socioeconomic status. He lives with his parents and his little sister. His family environment has an adequate degree of acceptance of Juan's characteristics and supports his educational process. Juan has external reinforcement with a psychologist.

The population is configured by all Childhood Education students in the sixth grade (ages between 11 and 12), who are 9 in total. All were interviewed, except one, who did not want to. From the set of their answers, those of five students were selected because they were more substantive and relevant. The process and the analysis of the collected data went through the following phases:

1. Design of the interview. A semi-structured model was adopted so that, at the time, the interviewer could adapt the questions and complete them with other people. It is composed of 19 questions, with the objective of investigating the perceptions of the classmates of a child with Asperger's Syndrome.

Perceptions	Questions
About the characteristics of a classmate with AS	<ol> <li>If we talk about a child with AS, can you identify which classmate we are talking about? Please tell us the first and last letter of his name.</li> <li>When did you realize that your partner had some peculiar characteristics?</li> <li>What was your reaction? What did you think? Did you tell anyone about it?</li> <li>How would you describe your classmate? What are the characteristics that most call your attention? Would you add anything else?</li> <li>Did you have to struggle to relate to him?</li> <li>How would you rate your experience with him?</li> <li>Could you describe good moments with him that you laughed at, had fun with, etc.?</li> <li>Do you remember bad moments when you got nervous or bothered in class?</li> <li>If you had a friend or sibling at school, what would you recommend that he did to deal with other children in general?</li> <li>And, what would you say if they had a classmate in the class similar to who we are referring to? What should they do? How would they have to do that?</li> </ol>
About the student's situation with AS within his peer group	11. Do you do things that others do not understand? 12. How did your classmates react to the way he is? How did you feel? Would you say they have adapted? 13. What words do you think your classmates would use to describe you? 14. What did the class do to deal with this? 15. Do you think they were helpful at making you feel good?
On the performance of teachers	16. Over these years together, what would you say your teachers did to make your classmate feel good and coexistence be facilitated? 17. How do you think they considered it? 18. How did they respond to his peculiarities? 19. Did you do anything concrete that would ease the situation for him and everyone?

**Table 1.** Interview questions Source: Elaborated by the authors.

- 2. Request for permission to interview children in this order: first to the teacher and, according to her, immediately to the parents of the child with Asperger's Syndrome; then to the School management; and finally to the parents of the children in the group of the 6<sup>th</sup> grade of Childhood Education. All agreed to cooperate and the proposed order was approved by the head of the research group, because in our institution, there is no ethics committee.
- 3. Conduction of the interviews with the children of the school. In order to accomplish them, the researcher went to school on the day previously agreed with the teacher of Juan's class.

The interviews were done individually for one morning. Their duration varied with each child, between 10 or 20 minutes. Their attitudes were usually of interest and curiosity in the process, since they not only intuited but also understood that their contribution was valuable.

- 4. Transcription of the interviews by the researchers themselves, keeping literally the expressions used by the children. The recordings took a total of 3 hours and 16 minutes, which involved 47 pages of transcriptions.
- 5. Interpretation of data using the ATLAS.ti software feature. Thus, the different citations inductively by semantic affinity were coded, taking into account the good practices found in response to the dimension in the different areas mentioned in the Wing's triad. In this way, the codes used were related to Social Relationship Ability, Communication Skills, and Mental and Behavioral Flexibility.

# 3 Analysis and data interpretation: Juan's classmates describe good practices of educational inclusion through cooperative learning

In the analysis of the information collected in interviews with the peer group of the child with Asperger's Syndrome, good practices of educational inclusion based on cooperative learning were identified, due to how students, teachers and the Educational Center in general faced Juan's singularities. Remarkably, after further investigation, we do so through the looks and voices of children in Early Childhood Education (Ainscow & Kaplan, 2005; Fielding, 2001; Messiou, 2006, 2012a, 2012b; Messiou & Jones, 2015), Juan's classmates of Childhood Education (with the exception of one) and with whom they have coexisted for the last 9 years. For the identification of the citations, the coding offered by the ATLAS.ti analysis program was used.

Then, the information obtained in the interviews with children was grouped into five categories of analysis, which in turn are located within each of the three dimensions of the Wing's Triad (Wing & Gould, 1979).

#### 3.1 CAPACITY OF SOCIAL RELATIONSHIP

#### 3.1.1 VALUING THE POTENTIAL OF YOUR COLLEAGUE

It seems important to emphasize that despite the existence and manifestation of Juan's certain disruptive behaviors in the classroom, his colleagues can recognize and value his potential.

"E.5- How would you describe your classmate? What are the characteristics that most call your attention? Would you add anything else?

R. - Oh, it's great, but sometimes in class he starts to bother a little. But, well, my mother already told me that I had to have patience, and I do, because sometimes he starts talking, talking about the bell and this .... but for the rest he is a good friend and always wants to play with us and, although he cries, sometimes we play crying. I don't know why and he still cares about us. I don't know ... One day we got like that because we had a test and he told us: what's wrong with you? Do you want a snack? I don't know, for me he's a normal child (P1, 41-44).

<sup>5</sup> The letter E refers to the question asked by the interviewer and the letter R is the student's response.

"E.- You have to tell me two or three little words that you think your classmates would use to describe Juan, um, three little things or, those you can think of, but ...

R.- "Funny, cool, very nice ..."

R.- "Especially funny, yeah ... Because the conversation he had with my mother when I couldn't go in the front seat of the car, she pampers me, I started to break my butt" (P1, 104: 109).

As it can be seen, the vision that Juan's classmates have is not to typify him as a "strange" or peculiar child. Through their words, it can be noticed how they become aware of the human background behind the classification, or, what is worse, the objectification to which students with diverse characteristics are subject to.

"Okay, and now I want you to describe Juan. What is he like?

R. Yes, Juan is very special, because he is also very smart, very intelligent, because he has a memory that is, he seems like a gifted child because he knows the license plate of my mother's car. So one of Juan's main characteristics is that, when he becomes obsessed with something, he keeps saying everyday ... There was a time when he became obsessed with elevators, the brands of the elevators, whether they worked correctly or not and we have a lot of fun, I have a lot of fun when he says that, and ... I really like him because he's very nice, besides he thinks I'm his girlfriend (P3, 52:53).

As it can be seen, for his classmates, Juan is a smart, intelligent, funny, friendly and a good friend. In this direction, students who have been part of Juan's life for years have managed to overcome barriers that the singularities that Asperger's Syndrome may cause and they are those who accept and value him as such.

# 3.1.2 SOLIDARITY, TEAMWORK AND FELLOWSHIP

Most classmates agree that sometimes it is a little complicated to relate to Juan, because he can be "tedious", "boring", and very "persistent in some things". However, even so, the truth is that they have developed cooperative learning skills that have led them to be in solidarity with him, to work as a team and to be good classmates.

"E.- Yesterday, for example, he got sick for three days and arrived on Monday and suddenly opened the door just by stretching his head and said: 'I hope you guys have a surprise party ready for me!' - and we did. .., if you saw the board, there was - quite large "surprise party" and we all shouted – Boo! -, he loves surprise parties ...

E.- Yes?

R.- "And we always do it for him, except that on that day we actually forgot, he did not see that we were screaming or whispering, so he opened the door and said: 'Guys, I hope you guys have a surprise party ready for me!'.

E.- That is, you do things you know Juan likes, right? And do you like to do them?

R.- "Yes, and he smiles very well, hey, he has a smile up here (he points high above the corners), if you see him smiling in the photos, it's very funny" (P1, 111: 115).

"E.- What do you think they felt?

R.- "Um, I don't know ... I don't know, they easily became his friends, Dd failed and became our friend and Je came from another school in the first place and became friends with everyone, I don't know ..."

E.- OK, very good.

R.- "We are few, we get along with everyone" (P1, 99: 102).

As it can be seen, children know Juan's characteristics. Not only does it not bother them, but they do enjoyable things that facilitate his integration and coexistence in the classroom and in the Educational Center in general. This confirms the idea of Pujolàs Maset (2012) on "cooperation implies the development of solidarity and respect for differences".

# 3.1.3 ACCOMPANYING AND BALANCING BETWEEN DEMANDS AND NEEDS: THE PRACTICAL EXAMPLE OF TEACHERS

Children watch everything. They learn more by looking at what is done than what they are told to do. In this context, it seems especially relevant to make visible a good practice carried out by the teachers in relation to the case. The issue is about facilitating learning and development. This is nothing more than the work of accompanying the student.

""E.- Okay, so what would you say your teachers did so Juan felt good and that all of you got along?

R.- "Well, for example, Ma, a classmate we had in childhood, got along very well with Juan, because, at the beginning, we were not all with everyone, as Juan said it was the period of adaptation. And I was with Jn all the time" (P1, 132: 134).

R.- The teachers, because as adults and such, understand that you have to have patience with Juan and have to help him because he does not have it, as he has Asperger's, but I think everyone tries hard and has a lot of patience , because teacher Ea has a lot of patience with Juan, although sometimes they get nervous and scream at him, but they even yell at him, but, but they have a lot of patience and they treat him well (P3: 139: 139).

It is inferred from this observation that a balance works properly between the demands exerted by teachers on the tasks that Juan must carry out and his needs.

R.- In fourth place, I don't remember, in fifth we had Ea, oh yes!, in fourth we had Me, well, I treated him like a normal person, but I always gave him a reward when he behaved well. I'd let him use the computers or leave for the break earlier. Then, Ea, whenever Juan wants something, first asks him to do his homework, and then asks him what he wants to do and let him do it; well, if it's not very special, let him do it every Friday, every Friday she lets him do it if he did his homework well, Ea lets him use the computer for two hours and Juan adores it (P1, 142: 143).

As it can be seen, the needs of the student with Asperger's Syndrome are not confronted; on the contrary, his own fixations and routines are used in his favor, creating a motivating element that results in the achievement goals in school learning.

#### 3.2 COMMUNICATION SKILLS

## 3.2.1 RECOGNITION, ACCEPTANCE OF DIFFERENCES AND EMPATHY

Some of the behaviors associated with the social deficit of children with Asperger's Syndrome are, according to Alonso Peña (2004), Attwood (2002) and Pérez et al. (2006), lack of interest in games and activities of his age, inadequate approaches to behavior, imposition of rules, exaggerated reactions. Contrary to this, the awareness of Juan's uniqueness, which his classmates possessed, made it possible spontaneously and intuitively to take various measures to regulate his reactions or reduce his chance of appearing. Thus, there are attitudes that promote

communication, respect and care among them against discord that could lead to disruptive behavior or ignorance of the problem.

"R. The first thing to have to live with a child with Asperger's Syndrome is patience, you have to be patient, because Juan is a child who sometimes gets nervous and is ... when he gets nervous or angry, he screams a lot, so we have to try to be patient and say: - Juan, calm down, or something like that, relax, it's not too much, let's play or tell him... You also have to follow the game because if he tells you something, and you don't notice, he will tell you - you can't throw things on the floor - for example, then, instead of being angry, talk to him - Juan, I don't know what, I don't know how, I do what I want – that's how the third grade children of this school do, and say, - ok, Juan, I'll pick it up and throw in the trash can; so Juan gets happy because you talk to him and do something good that he is recommending you to do. So he likes people to talk to him and do what he recommends or says ...". (P3, 93:93).

"E.- What do you think contributed so you have a partner like Juan in class? Imagine that he was not in your class, that you had never met him, what do you think was added having him in your class all these years, being your friend and helping him?

R. "Well understand people ... when I was little, I didn't know what it was to have a disease until I asked my mother, and I go to music school and there are also children with diseases, and I also help them ..." (P1 156: 157).

Certainly, knowing what is going on with a classmate makes it possible to issue responses according to his/her actions, showing an admirable ability to adapt. The children even use Juan's fixations to learn; naturally asking about them creates an environment where Juan can calmly show his knowledge and feel valued by his peers.

"E.- Does his obsession change?

R. Yes, now he focuses on cars, with brands and plates and with colors and everything, before it was with the elevators, after washing machines and very electronic things.

E.- Yes, all very electronic, but I'm sure everyone has learned a little.

R.- Yes, Juan is very intelligent.

E.- Of course, so when he talks about washing machines, elevators and cars ...

R.- We learn ..." (P3, 120: 125).

In general, maintaining proper and adequate communication according to the current social and linguistic canons is considerably complicated. However, Juan's classmates learned to appreciate other factors that favor communication: his fun nature, being a good friend, etc.

"R.- Juan is a partner who, kind of, when everyone talks, when he usually asks for something, nobody answers him. And he insists on things. And I don't know, everybody yells at him, nobody talks to him calmly. And Juan is practically a classmate who does not feel lonely. He is also a very funny, funny boy, um. Sometimes a little pushy, a little persistent. He talks to everyone, he's very direct. He sees someone he does not know and always talks to him, even if he doesn't know him. I don't know, he's very funny and very graceful. And if you play with him, he's a good friend, really" (P7, 50:52).

#### 3.3 Mental and behavioral flexibility

## 3.3.1 REGULATION OF DISRUPTIVE BEHAVIOR

Among the good practices, one can find a function of regulating Juan's reactions by his colleagues:

"E.- What was your thought? What did you feel? What did you think? When did you notice and your mother helped you understand why Juan was like that, different, and had Asperger's Syndrome?

R.- Well, I started to get closer to him, and not before, I didn't know that he had that disease and, when he was afraid of the dark, I didn't help him, but now since then I help him more, because I already know he has a disease, and then... I helped him more" (P1, 39:40).

"E.- And in that moment you have to make some effort not to say, - oh, Juan, you're bothering me!

R.- No, I already know him, and I don't say that to him" (P1, 53:54).

"R.- As a child, he was afraid of the dark and I always carried a flashlight and a bear that he liked very much, and it was my favorite stuffed animal, and when he cried I would lend him my flashlight and my bear and he would go to a corner to cry and talk to me and he liked it ... (P1: 69:69).

"E.- What did the class do to deal with this? You told me that your classmates helped him a lot, what else ...?

R.- We were helping him to understand some things that he didn't understand well and um ... nothing else I think, to try to understand things well, for example, that he had to do something and that was not assimilated" (P2, 83:84).

It can be observed that not only the behaviors that seek to alleviate a situation caused by Asperger's Syndrome appear, but also, preventively, they act seeking an adequate response. This is because the lived experience allows them to take advantage of the different stimuli and their responses:

"E.- They told us that you do it very well, that you treat him very well and that you live very well in the classroom, so what do your classmates do?

R.- Juan likes us to talk to him because sometimes he feels lonely, he likes us to talk to him and we talk about things he likes, because sometimes he gets obsessed with something, so we start talking about it, we can stay there for half an hour talking, because he always has a conversation, he always has something to say, so it's like that ..." (P3, 114: 115).

"E.- What would you recommend to this boy or girl, with Asperger's Syndrome, did to deal with other children? Imagine, it's your first day at school, and you have Asperger's Syndrome, so you have to advise him or her and say, - see, you have to do this and this, to relate to your peers - and then, what would you say?

R. Okay, it's ... someone who has Asperger's should try to relate to people, but what Juan has is that when you ask someone, what car do you have? and such - then the strangers get a little scared and do not quite understand what's happening, because they do not know what he's like, so I guess you should talk, ask 'what's your name?' or 'how old are you?' or I don't know, and try not to say many things ..." (P3, 39:49).

"E.- And in general, as a group ... What do you think they do to get on so well with it, so that this good coexistence is possible?

R.- Listen to him and not insult him or upset him. Do not do things that bother him. And talk to him, if he's just asking, talk to him, stay a moment with him" (P4, 79:80).

Another key characteristic for his classmates is to know how to listen. According to the authors mentioned (Alonso Peña, 2004, Attwood, 2002; Pérez et al., 2006), it is recalled that certain characteristics of the linguistic profile of people with Asperger's Syndrome indicate some difficulty in having a conversation or knowing what to say, which is not reflected in Juan's profile. However, other factors may appear, such as restricted scope, use of fancy words or verbiage on topics of interest. Given this, the students' good practices choose to listen actively and normalize the situation. By adopting an attitude of tolerance, most classmates make their actions more flexible than Juan's in a compensatory manner.

#### 4 DISCUSSION AND CONCLUSIONS

The good practices of Juan's inclusion, the child with Asperger's Syndrome, generated thanks to the cooperative learning developed by his classmates, are specified in the following considerations:

- His classmates are aware and sensitive to Juan's diversity, with whom they exercise a
  regulatory function, facilitating the balance between his unique characteristics and the
  environment that welcomes him through a positive coexistence.
- This materializes in attitudes of care, tolerance and understanding by his peers, projecting behavior in the classroom in which communication and respect are remarkable.
- Communication, although one of the areas affected by Asperger's Syndrome, has
  experienced a very positive development because of the attention and active listening on
  the part of the classmates in Juan's interests, which is a good example of respect for the
  difference.
- Although these narrow interests are a specific manifestation of Asperger's Syndrome, the
  peers say they find it useful for their own learning, so they encourage Juan to share his
  concerns with them.

It is concluded that Juan's classmates develop the capacity to address the three functional dimensions most affected by Asperger's Syndrome and to modify what, according to the existing literature on the subject, can be considered as expected.

Thus, in the area of social relations, instead of finding feelings of loneliness, difference and isolation, Juan's friends acquire knowledge that allows them to go beyond what his disability manifests. In addition, the potentialities of the classmate with Asperger's Syndrome, through an exercise of solidarity, fellowship and teamwork, facilitate his inclusion. Similarly, in relation to the Educational Center, the strategies needed to achieve the balance between the academic and behavioral demands they face in relation to Juan, who has his own needs, can be developed.

In the dimension of language and communication, Juan developed an admirable ability to adapt; the attitudes of respect and care among them made it possible to deal with the difficulties in using the language that Juan could manifest, both using a sophisticated vocabulary and the difficulty in knowing what to talk about or respect the order of the conversations, the literalness in the understanding of the language, his restrictions on the expression of emotions. In the dimension of mental and behavioral flexibility, which causes Juan to often disagree and

be angry with established rules, his peers developed the ability to regulate rigidity and spared no effort to explain to Juan the rules, to reflect on them with him and try not to get angry about it.

Therefore, it is possible to notice that peer involvement in the described cooperative learning process - one that leads students to count on each other, to collaborate and help each other - has proven to be a good practice for focusing on diversity and inclusion in education, which has been very beneficial to Juan's development. This contributes to the educational approach that the intellectual, language, and social skills of a student with Asperger's Syndrome always provides a benefit by being enrolled in regular schools. Specially, as long as the approach to a relationship networking with peers is always encouraged.

Finally, in addition to Juan, it is believed that all his classmates have been greatly benefited by having lived with a child with Asperger's Syndrome in the classroom. They have developed and perfected social skills and values of respect for differences that are essential to get closer to inclusive classrooms. The following answer is a paradigmatic evidence of what is said:

"E.- Why do you think it is good for you to have Juan as your classmate?

R.- Learning that there are some people who are different and who need more care than others, we should not yell at people, but we have to be good to them, and, although sometimes people are very persistent, we do not have to shout at them, but reassure them and tell them things peacefully. And that, despite the difficulty, we should try to incorporate more people" (P7, 113: 114).

#### REFERENCES

Aguirre, A. (1995). Etnografía: Metodología cualitativa en la investigación sociocultural. Marcombo. Retrieved in January 18, 2019 from https://dialnet.unirioja.es/servlet/libro?codigo=386582.

Ainscow, M., & Kaplan, I. (2005). Using Evidence to Encourage Inclusive School Development: Possibilities and Challenges. *Australasian Journal of Special Education*, 29(2), 106-116.

Alonso Peña, J. R. (2004). Autismo y Síndrome de Asperger: Guía para familiares, amigos y profesionales. Salamanca: Amarú Ediciones.

American Psychiatric Association. (2000). Guía de Consulta de los Criterios Diagnósticos del DSM-IV. Madrid: Editorial Médica Panamericana.

American Psychiatric Association. (2016). Guía de Consulta de los Criterios Diagnósticos del DSM-5. Madrid: Editorial Médica Panamericana.

Anne, A. (2003). Conceptualisation et dissemination des "bonnes pratiques" en éducation: Essai d'une approche internationale à partir d'enseignements tirés d'un projet. In C. Braslavsky, A. Abdoulaye Anne, & M. I. Patiño. (Eds.), *Developpement curriculaire et "Bonne practique» en Éducation* (pp. 1-17). Genève: UNESCO.

Attwood, T. (2002). El síndrome de Asperger. Una guía para la familia. Barcelona: Paidós.

Báez y Pérez de Tudela, J. (2007). Investigación cualitativa. Madrid: Esic.

Bisquerra, R. (2014). Metodología de la Investigación educativa. Madrid: La Muralla.

Domingo, J. (2008). El aprendizaje cooperativo. Cuadernos de trabajos social, 21, 231-246.

Duran, D., & Blanch, S. (2007). Read on: Un programa de mejora de la lectura a través de la tutoría entre alumnos y el apoyo familiar. *Cultura y Educación: Revista de teoría, investigación y práctica*, 19(1), 31-46. doi: https://doi.org/10.1174/113564007780191287.

- Fernández-Río, J. (2006). Estructuras de trabajo cooperativas, aprendizaje a través de claves y pensamiento crítico en la enseñanza de los deportes en el ámbito educativo. Paper presented from *Congreso Internacional de Actividades Físicas Cooperativas*, Oleiros, Coruña, Spain, 5.
- Fielding, M. (2001). Students as radical agents of change. Journal of Educational Change, 2(2), 123-141.
- Goetz, J. P., & Lecompte, M. D. (1988). Etnografía y diseño cualitativo en investigación educativa. Madrid: Morata.
- González Navarro, A. (2012). El Síndrome de Asperger: Guía para mejorar la convivencia escolar dirigida a familiares, profesores y compañeros. Madrid: CEPE.
- González, C., Cecchini, J. A., Fernández-Río, J., & e Méndez-Giménez (2008). Posibilidades del modelo comprensivo y del aprendizaje cooperativo para la enseñanza deportiva en el contexto educativo. *Aula Abierta*, 36(1), 27-38.
- Jackson, P. W. (1992). La vida en las aulas. Madrid: Morata.
- Langher, V., Ricci, M. E., Propersi, F., Glumbic, N., & Caputo, A. (2016). La inclusión en Mozambique: Un estudio de casos sobre una intervención de aprendizaje cooperativo. *Cultura y Educación: Revista de teoría, investigación y práctica*, 28(1), 56-71.
- Lobato Fraile, C. (1997). Hacia una comprensión del aprendizaje cooperativo. Revista de psicodidáctica, 4, 59-76.
- Lorente, E., & Joven, A. (2009). Autogestión en educación física: Una investigación etnográfica. *Cultura y Educación: Revista de teoría, investigación y práctica*, 21(1), 67-79. doi: https://doi.org/10.1174/113564009787531163.
- Macdonald, B., & Walker, R. (1975). Case Study and the social Philosophy of Educational Research. *Cambridge Journal of Education*, 5, 2-11.
- Méndez-García, R.-M. (2007). Las actitudes de los estudiantes hacia la universidad como indicador de calidad. Universidade de Santiago de Compostela, Serv. de Publ. e Intercambio Científico. Retrieved in January 18, 2019 from https://dialnet.unirioja.es/servlet/libro?codigo=703019.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Messiou, K. (2006). Understanding marginalisation in Education: The Voice of Children. *European Journal of Psychology of Education*, 21(3), 305-318. doi: https://doi.org/10.1007/BF03173418.
- Messiou, K. (2012a). Collaborating with Children in Exploring Marginalisation: An Approach to Inclusive Education. *International Journal of Inclusive Education*, 16(12), 1311-1322. doi: https://doi.org/10.1080/13603116.2011.572188.
- Messiou, K. (2012b). Confronting marginalisation in Education: A Framework for Promoting Inclusion. London: Routledge.
- Messiou, K., & Jones, L. (2015). Pupil mobility: Using students' voices to explore their experiences of changing schools. *Children and Society*, 29, 255-265. doi: https://doi.org/10.1111/chso.12026.
- Muñoz, P., & Muñoz, I. (2001). Intervención en las familias: Estudios de casos. In G. Pérez Serrano (Coord.), *Modelos de investigación cualitativa en educación social y animación sociocultural*: Aplicaciones prácticas (pp. 221-252). Madrid: Narcea.

- Palomares Montero, D., & Chisvert Tarazona, M. (2016). El aprendizaje cooperativo: Una innovación metodológica en la formación del profesorado. *Cultura y Educación: Revista de teoría, investigación y práctica*, 28(2), 387-395.
- Pérez, J. M., Pascual, R. A., Prudencio, S. F., Navarro, A. G., & Comí, M. L. (2006). *El Síndrome de Asperger: Otra forma de aprender.* Madrid: Comunidad de Madrid.
- Pujolàs Maset, P. (2009). Aprendizaje Cooperativo y Educación Inclusiva: Una forma práctica de aprender juntos alumnos diferentes. Vic and Manresa, Catalonia: Universidad de Vic.
- Pujolàs Maset, P. (2012). Aulas inclusivas y aprendizaje cooperativo. *Educatio siglo XXI: Revista de la Facultad de Educación*, 30(1), p. 89-112.
- Sandín Esteban, M. P. (2003). *Investigación cualitativa en Educación. Fundamentos y Tradiciones.* Madrid: McGrawHill.
- Simón, C., & Echeíta, G. (2012). La alianza entre las familias y la escuela en la educación del alumnado más vulnerable. *Padres y Maestros*, 344, 31-34.
- Simons, H. (2011). El estudio de caso: Teoría y práctica. Madrid: Morata.
- Stake, R. E. (1998). Investigación con estudio de casos. Madrid: Morata.
- Szatmari, P. (2006a). Una mente diferente. Comprender a los niños con autismo y síndrome de asperger. Barcelona: Paidós.
- Szatmari, P. (2006b). Comprender a los niños con autismo y síndrome de Asperger. Barcelona: Paidós.
- Tantam, D., Monaghan, L., Nicholson, H., & Stirling, J. (1989). Autistic children's ability to interpret faces: A research note. *J Child Psychol Psychiatry*, 30(4), 623-630.
- Taylor, S. J., & Bodgan, R. (1990). *Introducción a los métodos cualitativos de investigación: La búsqueda de significados.* Buenos Aires: Paidós.
- Tójar Hurtado, J. C. (2006). *Investigación cualitativa: Comprender y actuar.* Madrid: La Muralla.
- Vernetta Santana, M., López Bedoya, J., Gutierrez-Sanchez, A., & Ariza, L. (2014). El aprendizaje cooperativo en educación superior. Una experiencia en la adquisición de habilidades gimnásticas. *Cultura y Educación: Revista de teoría, investigación y práctica, 25*(1), 3-16. doi: 10.1174/113564013806309091.
- Wing, L., & Gould, J. (1979). Severe impairments of social interaction and associated abnormalities in children: Epidemiology and classification. *Journal of Autism and Developmental Disorders*, 9, 11-29.
- Wing, L. (1981). La Educación del niño autista: guía para padres y maestros. Barcelona: Paidós.
- Yin, R. K. (1989). *Case study research: Design and methods*. Applied social research Methods Series. Newbury Park, CA: Sage.
- Zabalza Beraza, M. A. (2012). El estudio de las "buenas prácticas" docentes en la enseñanza universitaria. Revista de Docencia Universitaria. REDU. Monográfico: Buenas prácticas docente en la enseñanza universitaria, 10(1), 17–42. doi: https://doi.org/10.4995/redu.2012.6120.

Received on: 28/07/2018 Reformulated on: 02/10/2018 Approved on: 22/10/2018