## THERE IS AN AUTISTIC STUDENT IN MY CLASS! NOW WHAT? THE REFLEXIVE JOURNAL PROMOTING PROFESSIONAL SUSTAINABILITY IN THE DEVELOPMENT OF PEDAGOGICAL OPPORTUNITIES FOR INCLUSION

Tem um Estudante Autista na Minha Turma! E Agora? O Diário Reflexivo Promovendo a Sustentabilidade Profissional no Desenvolvimento de Oportunidades Pedagógicas para Inclusão<sup>1, 2</sup>

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ABSTRACT: Higher Education has overcome the barriers of inclusion by envisioning the training of self-employed professionals prepared for the professions of the future. Considering the use of the reflexive journal technique in education, its effectiveness in the confluence of the demands of teaching for competence, exercise of active methodologies and inclusion promoted by the professional sustainability of a professor without special education training is questioned in this paper. The objective was to evaluate, through the systematic content analysis, three pedagogical practices recorded according to premises and practical arguments in teaching with (Biological Sciences) and without (Psychology) autistic students. The intervention was guided by the implementation of active methodologies during the school semester. The results indicate the effectiveness of the technique, since the identification of the problem, reflection and decision making had effects on the performance of the professor, crossing the development of skills in students with special educational needs, sensitizing them to overcome limitations also of neurotypic students.

KEYWORDS: Autism. Learning methods. Teaching for competence. Strategy for self-training. Educational Inclusion.

RESUMO: O Ensino Superior tem ultrapassado as barreiras da inclusão de modo a vislumbrar a formação de profissionais autônomos e preparados para as profissões do futuro. Considerando o emprego do diário reflexivo na prática e na pesquisa em educação, questiona-se, neste artigo, sua efetividade na confluência das demandas do ensino por competência, exercício de metodologias ativas e inclusão promovidos pela sustentabilidade profissional de um docente sem formação em Educação Especial. O objetivo foi avaliar, por meio da análise sistemática de conteúdo, três práticas pedagógicas registradas conforme premissas e argumentos práticos no ensino com (Ciências Biológicas) e sem (Psicologia) estudantes autistas. A intervenção foi norteada pela implementação de metodologias ativas durante o semestre letivo. Os resultados indicam a efetividade da técnica, pois a identificação do problema, a reflexão e a tomada de decisão apresentaram efeitos no desempenho do professor, transpassando o desenvolvimento de competências no estudante com necessidade educacional especial, sensibilizando-o para a superação de limitações também de estudantes neurotípicos.

PALAVRAS-CHAVE: Autismo. Métodos de aprendizagem. Ensino para competência. Estratégia para autoformação. Inclusão educacional.

#### 1 Introduction

Unquestionably, humanity's communication system is changing extraordinarily fast, to the point of compromising a structure consolidated in thousands of years of evolution.

<sup>1</sup> http://dx.doi.org/10.1590/s1413-65382519000400001

<sup>&</sup>lt;sup>2</sup> Funding from the Financier of Studies and Projects (Financiadora de Estudos e Projetos - FINEP) to the teacher training project conducted by the Teaching and Learning Center of the Pontifical Catholic University of Paraná (CrEARE-PUCPR).

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Information, restricted to a privileged part of society, has democratized to a point that anyone can become a generator and disseminator of content. Expecting to meet the demands of a generation that stands out for its accessibility, speed and ephemerality of intentions and interventions, traditional education has been mobilized in favor of teaching innovation. Success reports are added to the prospects of educating the future professional prepared for a world without physical, geographical, linguistic, cultural barriers and devoid of labels and stigma attached to the conventional professions (Gadotti, 2000). On the other hand, the uncertainties of this future and the resistance of professors and students constitute barriers to be overcome through the elaboration, application and validation of active methodologies (AM).

Technology inserted in Higher Education has subsidized new pedagogies and also supported Inclusive Education, providing access to university for all those who do not fit the standard of normality dictated by scientific rigor. Thus, it is justified the need to analyze the pedagogical practices of AM application whose preparation and adequacy should include in their agendas the inclusion of neuroatypical students.

The conception of this study is based on the association of professor self-training practices achieved through reflective journal, logbook, e-journaling or reflective practices which consist of the registration of the conception, execution and analysis of pedagogical practices. These have already been allied to the process of inclusion of Students with Special Educational Needs (SSEN), whose success has been attested in teacher training (Carter, 2017; Novak, Murray, Scheuermann, & Curran 2009). Krones (2016) pointed out that the journal should be included in the planning strategies of professors without special education training, since they need to adapt their pedagogical practice and promote cognitive and social inclusion. Although Basic Education has benefited from research into new pedagogical techniques that promote inclusion, little attention has been directed to Higher Education (HE), which has been demanding more attention in view of the growing number of students with various educational needs.

The identification of effective instructional strategies for improving daily life skills, to Spencer (2012), is fundamental to assist the SSEN. Expectation that is pronounced in HE where the autonomy of the student is aimed. Thus, the guiding question of this study consisted of questioning the efficiency of the reflective journal in promoting self-regulation of professors without special education training on the challenges of including students with Asperger's Syndrome (SAS) in HE. The hypothesis that the journal technique, associated with an environment conducive to monitoring student learning, is able to promote the development of reflexive skills by confronting the professor with disorienting classroom dilemmas was tested. Reflection achieved by comparing journals from classes with different inclusion conditions. The potential promoter of perspective changes that have spurred positive personal change is a rich opportunity for professional development. Thus, the objective was to evaluate, through systematic content analysis, the pedagogical practice, recorded according to the premises and practical arguments of teaching with and without autistic students. In order to do that, next it is presented the theoretical and conceptual foundation followed by a systemic analysis of three logbooks kept by a HE professor of two Biological Sciences classes and a Psychology class from a private university in Southern Brazil.

# 1.1 What does a teacher/professor with no special education training need to know about autism?

In a naturally diverse class of students and in an environment that enables inclusion, it is expected to encounter a wide range of cognitive, emotional and intentional processes. Therefore, preparing a class based on an average expectation pattern can compromise the desired results. While many students will have limitations involved with a poor prior educational background, others will face emotional problems and neurological and physical impairments that may affect their learning. In this context, it is highlighted: depression, Attention Deficit Disorder (ADD), vision or hearing problems and Asperger's Syndrome (Castanho & Freitas, 2006).

Although the dissemination of research on inclusion in Elementary and High School has been pronounced, it is still scarce in HE (Castanho & Freitas, 2006), based on the belief of greater effectiveness of interventions in childhood (Grogan, 2015). Costa and Marin (2017) conducted a study from the perspective of HE students, parents and professionals and found that the representation of the completion of SAS graduation is not unanimous, aiming from autonomy and good placement in the market to the realization of the immediate dream. However, the relationship with the institution needs to be improved and professors need to be qualified to promote inclusion (Castanho & Freitas, 2006).

In 1994, the National Special Education Policy was published in Brazil, providing the accessibility of students with disabilities in regular education with accompanying and pedagogical adaptation, concurrently with the National Special Education Policy in the Inclusive Education Perspective (*Politica Nacional de Educação Especial na Perspectiva da Educação Inclusiva*, 2008), which came to define Special Education as a transversal modality at all levels and stages of education. HE should promote access, permanence and participation of students with some type of disability, global disorders and high level skills.

The Statute of the Person with Disability (*Estatuto da Pessoa com Deficiência*, 2015) considers disability to be long-term physical, mental, intellectual or sensory impediments, which may hinder full and effective participation in society on an equal basis with others. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Asperger's Syndrome is included in the Autistic Spectrum Disorders (ASD) category, merging: a) communication and social interaction deficits, including resistance to being touched and difficulty understanding figures of speech, sarcasm, alien feelings and rules of communication; b) presence of a repetitive and restricted pattern of activities and interests; c) presence of symptoms since early childhood, which may or may not complementary be manifested; d) it differs from autism as it is not accompanied by language delay or impairment or cognitive development.

The term "autism" has been used for almost 100 years, incorporated into the root "autos" meaning "I" in association with social isolation as the main manifestation of the disorder and a feeling of fullness and pleasure in being alone. After several changes in the denomination, in 1987, it was coined as "Autistic Disorder". The publication of the 5th edition of the DSM, in 2013, determined the inclusion of diagnoses of Autistic Disorder and Asperger Syndrome in the generic term "Autistic Spectrum Disorder". Due to the diversity of manifestations, it

is difficult to relate the cause, being strongly linked to the interaction between genes and environment (Grogan, 2015).

### 1.2 EDUCATION IN HIGHER EDUCATION

The 2017 HE Census registered 2,248 institutions in Brazil, of which 87.9% were private and with a 33.2% increase in the number of SSEN enrollment, of which 72% were private. Students with mental disabilities totaled 477 enrollments, highlighting the low frequency of SAS, totaling only 30 enrollments in the state of Rio Grande do Sul, Brazil, indicating an insignificant inclusion in view of the frequency of people with intellectual disabilities in the national territory (0.8%) (National Institute for Educational Studies and Research Anísio Teixeira [INEP], 2018; Brazilian Institute of Geography and Statistics [IBGE], 2013).

The right to Higher Education of persons with disabilities is ensured and based on the principles and guidelines of the Convention on the Rights of Persons with Disabilities (United Nations [UN], 2006). To Martins (2012) and Castanho and Freitas (2006), permanent education is essential for education professionals to act effectively, so that the limitations inherent in inclusion and expressed by prejudice can be minimized by recognizing these difficulties.

Higher Education has been facing the growing demand for ASD students who meet admission requirements (Martins, Leite, & Lacerda, 2015). According to Grogan (2015), there are transition deficits, academic performance and social skills, whose techniques can be used to support ASD through a teacher training program. According to Odom and Wong (2015), only 1/3 of ASD meet college requirements, of which only 20% can complete their studies (Shattuck et al., 2012), due to the need to overcome many obstacles maximized by the difficulty of adapting to an environment prepared for neurotypes. In addition to the difficulty of compressing disabilities and failures combined with the diversity range of SSEN. According to Taylor (2005), there is also a lack of research on SSEN and Higher Education, accentuated by the increased incidence of SAS.

Given the improved diagnosis, it can be attested that the presence of SAS in the university environment is more common than it is known (Cowen, 2009). Colclough (2017), when studied these students' experiences, found in social experiences the greatest impact on persistence and retention. In most cases, students chose not to be socially involved, claiming to meet this need with family connections. The SAS recognized the positive impact of professors on their self-confidence and awareness. Grogan (2015) highlighted the transitional auxiliary programs for first-year students from numerous universities, intended for retention, adding academic assistance, self-defense, and social skills support. The author suggested that departments and colleges of education could provide skilled instructors for the smooth transition, highlighting MoSAIC at the University of Tennessee in Chattanooga.

Hart, Grigal, & Weir (2010) presented an innovative model from different US universities that created transition projects from High School to University. In it, the student can create his/her action plan and the path he/she intends to follow without having the formal commitment of an undergraduate course, but using time and space to become self-aware and adapt to the reality of HE. However, even having this program, many students do not enjoy

their rights, probably due to anxiety about the disclosure of their disability. To Taylor (2005), the way many professors deal with SSEN may constitute the biggest barrier to the completion of the course, due to resistance or misunderstanding of the need for adjustments, promoting distance between students. According to Grogan (2015), the little knowledge, the invisibility of the disorder and the intense stigmatization are associated with the distancing of the professor.

The defense that SSEN should have the opportunity for inclusive classrooms was put forward by Moeller and Ishii-Jordan (1996), linked to the need for professors to believe that they can learn despite any negative environmental influences in their lives, and that are able to reach any other student. To the authors, the current concept of inclusion seems to depend on supporting skill and learning by demanding the joint work of management, regular educators, specialists, classmates, and family.

Castanho and Freitas (2006) stressed the need for inclusive education practices to be experienced in the environment where scientific, cultural and social development takes place. However, inclusive education is a challenge for HE, whose exercise of democracy and citizenship is conditioned to the preparation of professionals, added to the actions and policies implemented by the institutions. On the one hand, contrary to what many educators expect, there is no simple, ready-made way or answers to equip them with a set number of skills. On the other hand, challenges require collaborative teams that build responses based on reflection, observations, readings, experiences, and collaborative efforts.

#### 1.3 ACTIVE METHODOLOGIES AND STUDENT WITH ASPERGER SYNDROME

The traditional teaching method with expository classes, to Grogan (2015), is a limiting factor for the inclusion of SAS in HE. To this end, it suggested the creation of AM that benefit positive relationships and promote the psychosocial adjustment of the student. The author cited Universal Design for Learning as an approach that promotes access, participation and progress in the curriculum, limiting learning barriers. The ways of learning and expression are varied, students can demonstrate skills in countless ways by having their strengths stimulated, being protagonists in the elaboration of the task list, stimulating collaboration and engagement.

The inclusion of neuro-atypical students calls for an accessible pedagogy that considers the individual, aligned with teacher training programs. To the SAS, one should take a closer look at the limitations imposed by the media, especially because it is highly valued and encouraged in the academic environment, often more insurmountable than the academic challenges themselves. Odom and Wong (2015) attested to positive results in activities involving peer-mediated guidance or intervention, especially with teachers in training, as it provides mutual benefit. In a mentoring environment, task analysis, goal setting, time management techniques, and study, self-management skills, and perhaps, most importantly, how to accept and communicate with an SSEN can be applied.

#### 1.4 THE LOGBOOK PROMOTING AUTONOMY THROUGH SELF-REFLECTION

Teachers' reflection on their own classroom discourses has been considered as an efficient and plausible methodology to be transposed to countless applications (Orland-Barak & Yinon, 2007). According to Ponte (2002), although the professor performs reflective inquiry activity intuitively, the adoption of a structured approach implies an increase in the quality of teaching work that must go beyond the conduction of the teaching and learning process and student assessment. Thus, there is a contribution to the development of an educational project of the institution and intermediation of the relationship with the community.

Teacher education in Special Education, to Novak et al. (2009), has as its biggest challenge the impact on the consolidated beliefs of how to deal with teachers, having in the use of the logbook a way to develop the professional critical sense and identification of students' skills. Spencer (2012), when analyzed the self-perception that primary school teachers have about their ability to devise strategies for inclusion of SAS, identified a lack of competence, time and support, highlighting the need for opportunities for continuous and sustainable professional development independently of the situation or environment. Thus, he pointed out that special education teachers should be able to exercise control measures over their own perceptions, since strongly rooted beliefs demand motivated feedback from the perception that they can do something effective.

The application of the technique requires the development and validation of an instrument to assess the level of reflection. Fenstermacher and Richardson (1993) proposed the practical argument as a training strategy, since it allows the teacher to reconstruct his/her convictions about his/her own action in the classroom and promote the change of his/her practical reasoning and his/her subsequent action. To the authors, the practical argument is the modeling of practical reasoning that can be described by four premises and one action: a) value premise: refers to the imputed value, which can be a declarative or principle statement; b) conditional premise: statement that defines, interprets or imputes meaning to an action; c) empirical premise: statement submitted to the proof of facts; d) situation premise: statement that points to the specific context in which the action took place; e) action or intention to act: consists of the conclusion and the action plan.

#### 2 Method

#### 2.1 CHARACTERIZATION OF THE CLASSES

This study consisted of a systemic analysis of the logbooks of a professor of the Biological Sciences and Psychology course of a private University of Southern Brazil in the first semester of 2018. The diaries were related to three classes, two from the first period, consisting of the course of Biological Sciences with 40 students with an average age of 18 years, morning shift, discipline of Zoology (ZB) and Psychology with 60 students with an average age of 18 years, morning shift, discipline of Ethology (EP). The third concerning the subject of Ethology for the 7th period of the course of Biology (EB), with 40 students with an average age of 20 years, afternoon shift. In the 1st period of the Biology Course, a male SAS, 18 years old, was attending the course; and in the 7th period, a 21-year-old female SAS.

#### 2.2 ELABORATION OF THE LOGBOOKS

The routing of the disciplines was guided by the implementation of teaching by competence with the insertion of the use of AM in the institution, and the logbook was the proposed method for self-assessment of pedagogical practice. The elaboration of the diaries was oriented to contemplate the instrument proposed by Fenstermacher and Richardson (1993).

#### 2.3 Variables

As the classes unfolded, the professor came across three situations: a) 7th semester class with known SAS; b) 1st semester class with unexpected SAS; c) 1st semester class without SSEN diagnosed.

#### 2.4 Analysis of the logbooks

After the end of the semester, the content was categorized according to the semantic technique of content analysis by Bardin (2011), by identifying similarities between semantic, linguistic, and psychological structures, considering the frequency of the information and its meanings by the professor of the discipline and subsequently validated by a psychologist. Inter-observer agreement was obtained by means of reliability tests in 25% of the observations of each phase of the analysis, in which agreement greater than 76.6% was obtained between the records of the principal researcher and the assistant. In each category, the percentage corresponding to the particular insertion of the inclusion question and the SAS was quantified.

### 2.5 Legal procedures

This research was conducted based on ethical precepts and follows the guidelines of the National Research Ethics Commission (CONEP) registered by the National Health Council (CNS) in Resolution CNS 466/12 and Resolution CNS 510, and the research was approved by the CEP-PUCPR no. 2,105,215. Confidentiality and the right to autonomy of the research participants were respected, as well as the confidentiality and integrity of the data, being the SAS tutors aware and in agreement with the present research.

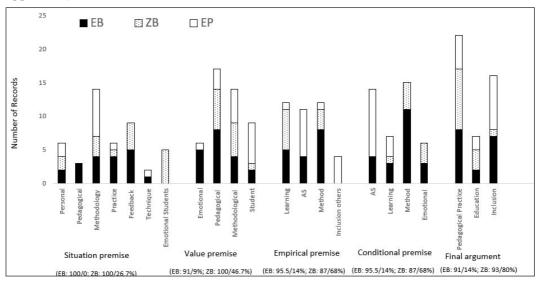
#### **3 RESULTS AND DISCUSSION**

#### 3.1 Reflective logbook categorization

The categorization of the logbook content presented specificities according to the classroom; however, in the three, the pedagogical bias prevailed on the premise of value, related to learning, autonomy, construction, ethics and communication. The classroom without SAS and the one with known SAS stood out on the conditional premise, punctuating excessive activity and time control; as well as in the final argument involving the pedagogical practice. In the novice SAS class, the logbook showed a relationship with situation assumptions focused on students' emotional responses, such as the inclusion of SAS and the other SSEN. Whereas the final argument was focused on the processes related to education with the development of autonomy and social skills (Figure 1). These results indicated that the presence of SAS

supported the reflection and the construction of the argument focused on the reflection of the pedagogical practice, focusing on the student.

These data support the expectation of sustainability of the teacher who still seeks external support. Marques and Gomes (2014) showed that university professors, although signaling a willingness to discuss inclusion, support resistance in the institution's lack of preparation and support to provide pedagogical, structural and communicative adaptations. Alzate (2018) stressed that the institutionalization of education with an inclusive focus on historically discriminated groups should promote the empowerment of administrators and academics regarding accessibility, flexibility, relevance, equity and participation of SSEN in academic programs. Expectation that goes against Brown and Freitas (2006), who pointed out the reflective educator, who has an active, didactic, political and ethical posture, which goes beyond the demand for techniques and inserts the change in values that envisions SSEN autonomy so that he/she has access to the common space of life in society and with equal opportunity.



**Figure 1.** Categorization of the content of the reflective diary concerning the 7<sup>th</sup> semester of Biology (EB), 1st semester of Biology (ZB) and 1st semester of Psychology (EP) classes, as proposed by Fenstermacher and Richardson (1993). The percentage values correspond to the frequency of the category registration for the class involving the autistic student (AS). Source: Research Data.

The results of the categorization attested to the effectiveness of the diary technique in the reflection of the pedagogical practice, since it promoted the insertion of the inclusion issue, especially at deeper levels. These results add the indication of Carter (2017) in the use of the logbook, both in the form of response and dialogical, supporting the use of e-journaling as a method of teacher education in Special Education. Thus, through the use of transformative learning theory, the author evidenced that the tool allows reflection on classroom decision

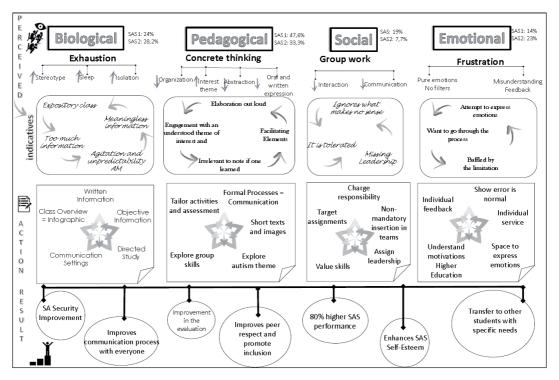
making, dealing with disorienting dilemmas and, consequently, instigating positive transformation of the individual linked to learning.

Spencer (2012) proposed the weekly writing of progress, challenges, successes and failures, based on the social approach, the cognitive theory of self-efficacy and the perception of organizational skills. Beliefs in attitudes were thus conceived as vital to understanding and improving practices and shaping learning environments. Judgments and daily decisions on how to improve learning should therefore be derived from the exercise of perception, understood as mental or cognitive representations, with the potential to affect behavior. Therefore, self-efficacy, inherent in reliance on one's own abilities to resolve, supervise and execute the necessary plans in future situations, is expected to influence the environment. Thus, opinions linked to instructional tasks have the potential to maximize student learning.

Alzate (2018) disclosed as an inclusion strategy, in addition to the systematic record, the offering of a trust-centered environment that is consistent with the individual time and at the same time warm in listening without judgment and evaluation of the process. Castanho and Freitas (2006) considered reflective practice as the basis for a regular, instrumentalized and effective methodological analysis able to balance uncertainties, singularities and value conflicts. However, the authors stressed that they cannot be limited to common sense and experience, requiring a structure of knowledge that transcends essay and error by adding continued reflection as a culture in the educational segment. In this sense, the resignification of educational processes is allowed, with profound transformations in the academic community as a whole. To Alzate (2018), the process of accompanying learning should be understood as a means of self-regulation of teachers, since the reflection on their performance allows the meaning, research and resignification of their job.

#### 3.2 CONTENT ANALYSIS OF THE DIARY INHERENT TO INCLUSION

The qualitative analysis of the reflective diary allowed the identification that the teacher understands the behavior of the SAS and, therefore, adjusts the communication processes, resulting in increased self-esteem, confidence and recognition of his/her skills by peers. The most relevant point was the improvement of teacher communication with the class as a whole, and the possibility of transposition of the focus of SAS to other SSEN. In the teacher's discourse, it was possible to distinguish the interaction with SAS represented in four modalities: biological, pedagogical, social and emotional, being more frequent the pedagogical bias in the report of both SAS (Figure 2).



**Figure 2.** Flowchart of the process of perception, intervention and evaluation of referral with a student with Asperger's Syndrome described in the reflective diary.

The biological issue was mainly linked to the physical tiredness identified after an intervention that required the student's mental effort for concentration and abstraction, such as: a) lecture and information overload; b) subjects that were not his focus of interest; c) unexpected situations typical of the AM involving movement, dynamism and novelties. At such times, the student could become anxious and express stereotypes or abruptly withdraw into isolation. The teacher's perception and action find support in the literature, as, for example, in Roberteson and Ne'Eman (2008), which indicate that SAS hypersensitivity originates from an inability to process sensory information, leaving it overloaded. Pereira and Seiça (2014) point out that, although there are some common characteristics of the same syndromological structure, the different degrees of development individualize adaptation.

As an action strategy, the teacher adjusted the communication with written activities delivery, clear and objective information. A directed study was also conducted in which sequential successes increased student safety with regard to their own learning. As a means of providing a reference of the path taken with the discipline, infographics were made for the synthesis of the classes. These equally benefited all students and the teacher in the management of the studied subjects.

The pedagogical bias was linked to the mental processes proper to concrete thinking, evidenced in issues involving organization, content perception and oral and written expression. The SAS demonstrated rapidity of reasoning and interaction at times when issues of interest

were addressed, corroborating the inference of Pereira and Seiça (2014), who point out that many SASs have intellectual capacities and memory even above average. However, they often have difficulty or resistance in adhering to formal oral and written communication processes. Roberteson and Ne'Eman (2008) point out that task management and written expression are the biggest challenges that can be overcome with good use of technological resources. Accompanied SASs often orally expressed their mental elaboration process or used facilitating communication elements associated with objects or command, generating class anxiety and derision. This finding corroborates Costa and Marin (2017), who point to the possibility of deliberate use of language skills to process thoughts verbally without realizing that it bothers them.

The teacher's actions consisted of asking the student to write down everything he wanted to say, which was worked then with the teacher who dedicated about ten minutes at the end of the class for this activity, creating a routine that gave the SAS security. The means of communication were also adapted using short texts, images and videos, which were directed to stimulating skills, insertion in the context of the class and in the evaluation system, resulting in a performance of over 80%, in contrast to the traditional system of assessment. According to Alzate (2018), the assessment should be perceived as an educational opportunity inserted in the context of educational justice that transcends the declaration of knowledge for situated learning.

When promoting assessment centered on tangible and observable productions, the teacher promotes flexible process evaluation strategies, not just the final product. This allows to explore the individual-time ability of all students who engage collaboratively in their professional profile, individual performance and work experience. The initial overprotection directed to the SAS by the teacher, besides generating dependence, caused discomfort in the other students who felt excluded and, consequently, the rejection of the SAS. Throughout the classes, in addition to the teacher exploring the skills of the SAS with the work group, he explored the theme of autism inserted in the subjects of study. The difficulty of communication may trigger a preconception that there is a cognitive difficulty. According to Costa and Marin (2017), teachers may be surprised at the student's academic performance, sometimes well above other students, who may have different degrees from other educational needs that may compromise learning, which requires more adaptations than the ones for the SAS.

The social bias was evidenced in the dynamics of team work, inherent to the AM and related to the difficulties of interaction and communication. The SASs resisted joining the group, ignoring meaningless processes or were tolerated without being assigned responsibilities. The impulsive attitude of forcing the student to participate in an AM practice generated anxiety that spread throughout the class. However, the attitude of the teacher in performing the activities with the SAS promoted confidence and, naturally, the receptivity of the other students. The teacher's intervention in the team dynamics with the attribution and collection of responsibility and leadership institution to the SAS promoted self-esteem improvement and recognition of capacity. These results corroborate Costa and Marin (2017) and Pereira and Seiça (2014), whose students' observations lead to the perception of body expression in the face of disconcerting situations such as speaking in public and, automatically, the possibility of intervention.

In this sense, we highlight the remarks of Roberteson and Ne'Eman (2008) in relation to the use of alternatives to make life in society more comfortable, focusing on social

networks and promoting a space where witness and support among autistic people can improve self-esteem. The Institution can also intermediate this process, as Alzate (2018) exemplified the implementation of institutional programs aimed at preventing discrimination and offering the opportunity to educate other students about respect for difference. While Zaeger and Alpern (2010) presented a transition program between High School and University based on social media adjustment, proposing personalized self-efficacy tests and observation in the natural environment. Preliminary data pointed to greater difficulties in knowing what to say in a conversation, understanding jokes, and recognizing whether the listener is interested or not. To this end, conversational skill improvement programs using symbols, as well as the inclusion of SAS in community programs, have promoted academic, social and vocational enhancement.

The emotional context was identified in situations of frustration and anxiety regarding corrective feedbacks in public. Even individually, the SAS showed difficulty in elaborating the feedback, enhancing an emotional burden in the face of its limitation and the impossibility of overcoming it through the processes used by neurotypic students. The teacher understood that it was necessary to adjust the communication and perform the individual feedback inserted in a routine, in order to create a safe space to show his emotions. Just as it was important to show the SAS what was incomplete, that other students also make mistakes and help him manage his emotions, leading him to understand that the error is expected and desired at this time. It was understood to be important to know the motivations that led him to enter Higher Education in order to insert the content in a larger context. Wanting to surpass and be equal causes him to reject his rights to have a different assessment, corroborating the report of a research conducted by Costa and Marin (2017), and attested in the report of the student who says he does not like to talk about it, because he feels bad.

According to Rodrigues (2004), the SASs are aware that they are different and suffer from being differentiated, especially when they feel rejected and ridiculed by the class. Therefore, Pereira and Seiça (2014) reinforce that it is essential to pay attention to the impact of certain approaches made to the SAS in public. Perhaps the thing that distances the SAS most from people is that he/she do not stare when talking, which within a social pattern may show a lack of interest, commitment and empathy, and deprive that person of the ability to care and feel. Understanding these aspects reached after a deeper reflection allows us to overcome the observations of Williams and Wright (2008), who state that SASs are rated as weird because they have difficulty developing empathy and modulation of social interaction plus style rigidity, different world perceptions and difficulty understanding language and emotions.

Adjusting the teaching methodology to SAS needs did not change the planned routine in the teaching plan and improved the teacher's own organization and the communication process with other students, identifying other traditionally neglected needs legitimized in student autonomy in managing their own demands. In the end, the teacher reported understanding education as a process of communication, and although he longed for ready-made formulas for how to handle the situation, he faced the challenge of building relationships. Relationships are built daily based on the trust of the giver and the recipient. In the end, the teacher understood that the limitation is not just the SAS's. According to reports, the relationship with SAS has been described as simpler and purer since SAS demonstrates a purity of intent whose communication without social filters can offer a relationship based on

trust, increasingly rare in contemporary societies. As a channel of trust was established, the teacher became more confident in his performance. According to Costa and Marin (2017), for many teachers, contact with SAS has been the first experience and this may or may not be good, depending on how it is conducted.

The analysis of the diaries pointed to the importance of the teacher not being surprised by the existence of SSEN, corroborating the opinion of a teacher interviewed by Costa and Marin (2017), because it allows teachers to be prepared, research on the peculiarities of this disability and, thus, adapt teaching materials and class routine. The teacher feels excluded from the inclusion process when there is no support available to better serve the student. In this study, it was found that preparing a first day of class, with motivating activities involving movement, participation, creativity, interaction was a fright to the student with SAS. However, the maintenance of the planned practice, besides contributing to the failure, can compromise its sequence. Obviously, intimacy with the SAS is built, involving adjustment in communication, observation and attention to his/her learning.

Many university professors have no pedagogical training, and some teach as a condition for conducting research. However, even professors with a pedagogical background report feeling unable to meet the demands of SSEN as they were trained to work within a range of normality and autonomy (Costa & Marin, 2017). Moreover, they rely on the common sense that the academic system or the job market will select the most fit. According to Alzate (2018), it is not a matter of minimizing the curriculum, but of seeking alternatives that promote the review of the professional profile, own knowledge and evaluation.

Contrasting the argument of lack of support, Costa and Marin (2017) present the speech of the pedagogical support team of a private HE institution that, although they were available, the professors never asked for their support. Thus, the authors highlighted a neglect to mobilize in meeting the needs of students, to better understand their disabilities and the treatments submitted. In addition, another professor interviewed reported that she felt unprepared to establish strategies adapted to any student who was apart from what was considered normal. Castanho and Freitas (2006) point out that the professor prepared for a standard of normality shows difficulty in accepting the different, as well as understanding that crossing these limits means contributing to the construction of a democratic society.

The analyzed content elucidates the existence of a student who disagrees with the idealized pattern that generates a state of anxiety in the search for techniques, answers and means and fit him into the desired model (Castanho & Freitas, 2006). However, it is important to reconsider that education is a time-permeated process, built daily through communication that permeates relationships whose mutual trust will naturally lead to a solution (Figueira, 2018). According to Figueira (2018), anxiety and mastery of techniques can hinder the process, since people are subject to their own peculiarities conditioned on their previous experiences and the degree of impairment of their disability, whose knowledge serves only as a guide to some strategies. Spencer (2012) found that special education elementary school teachers have high self-efficacy, responsiveness to change their teaching approach, experiment with new strategies and adapt materials, as well as incorporate more humanizing approaches to promote active student participation.

According to Figueira (2018), no teacher is prepared for inclusion until a student to be included is part of their reality. However, while the accommodating educator will claim to be unprepared because it is easier to reject or ignore a student, one who is aware of his or her ethical commitment and challenge will mobilize to promote that student's overall development. To Figueira (2018), the role of inclusion requires a paradigm shift in favor of equal opportunities in the education of a citizen who, besides having confidence in their potentialities and awareness of their limitations, will also have as a model a process based on ethical values and respect for diversity, essential for life in society.

#### 3.3 Self-assessment of students with asperger syndrome

The known SAS found the learning of the discipline good because he perceives better the behavior of animals than people's behavior, and he said he has overcome obstacles in the field observation. He considered the AM excellent for students to learn more efficiently and did not perceive any harmful but favorable aspects in the perception of reactions of people and animals. The novice SAS found his learning excellent because he liked the subject more and more, he found the AM useful for taking a fresh look at the animal world, considered animal classification the best lesson, and signaled the expectation of one day discovering a new species. He considered oral names and pronunciations and writing as the biggest difficulties. He said that he considered the professor to be an excellent person with a clear way of expressing himself, highlighting his enthusiasm and intelligence that aroused his interest in the topics addressed most.

On the one hand, García and Rúa (2013) interviewed 32 SAS from different countries and attested satisfaction with the course; however, they pointed to the lack of preparation of the professor and the need for adaptation of the teaching material. On the other hand, Roberteson and Ne'Eman (2008) presented reports of autistic academics, their challenges and their overcoming strategies for inclusion in HE, relating mainly to social adaptations whose support of technology, social networks such as wrongplanet.net and institutional programs, involved events and an exchange environment that promoted the movement of neurodiversity. Alzate (2018) reinforced the importance of generating formative spaces to live with difference and overcome discriminatory and stigmatized conceptions, mainly because they realize that SSEN is treated differently. Only the entrance to the course is not enough for an SAS, because, according to Camargos (2013), the low resistance to frustration can make them not understand the processes, and all subjects that make up a course require specific peculiarities, such as adherence to routines and resistance to change, which can be taken as a starting point for designing activities and developing the discipline in a logical way, reducing anxiety, including that of other students.

#### 4 Final considerations

The results indicate the effectiveness of the daily reflexive technique in the process of inclusion of the SAS in the HE through teaching by competences and AM by a professor without special education training. Efficacy was attested by the professor's report that identifies

the problem, reflects and makes decisions, impacting on his performance, whose competence development has passed the SSEN, making him aware of the limitations of neurotypic students.

Self-regulation of pedagogical practice led to the understanding of education as a process mediated by its own rhythms, built daily by communication that consolidates relationships, whose mutual trust will naturally lead to a specific solution for each situation. The limitations identified for the SAS related to biological, pedagogical, social and emotional aspects are equally limiting to other students who also have difficulties in relating, elaborating their emotions and self-managing their learning. Thus, it was evidenced that directing attention to the effectiveness of communication processes is essential in a globalized world characterized and praised by diversity. In addition, the flexibility of the education system is essential to generate and apply means that promote the professional and personal development of all members of society, equally important for their integrity. The world has been undergoing technological transformations that have had repercussions on social structures, professional activities and, obviously, on the role of the HE and the professor that crosses the training of specialized labor for multiprofessionals without geographic, physical and technical barriers, demanding the renewal for an inclusive, democratic and citizen education system.

#### ACKNOWLEDGMENT

To all the students who contributed directly and indirectly to this research, especially the two ESA students who represent the beauty of diversity and show that there are multiple ways of perceiving and interacting with life, which allowed me to know a softer way of perceiving it. To FINEP, which funded PUCPR's pedagogical training project; the CrEARE-PUCPR team; and SEAP-PUCPR.

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