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Education for inclusion: a proposal to improve service use of multiple intelligences in children in the initial grades of elementary school

Education for inclusion: a proposal to improve the care of the use of multiple intelligences in children in the initial grades of elementary schooltwo

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SUMMARY

This project proposes, based on the investigation, identification and analysis of collected information, to understand and identify actions and attitudes that can improve educational services based on inclusion and the concomitant use of multiple intelligences in students with Autism Spectrum Disorder (ASD) in initial grades of Elementary Education in schools in the municipal network of Vilhena-RO. Methodologically, it is action research, with a mixed approach: quantitative and qualitative. It uses data collection instruments, pre-test and post-test tests and questionnaires: multiple intelligence test, applied to students, aiming to identify the types of intelligence present; questionnaire, applied to Teachers, to identify difficulties and successes in serving these students; learning verification test aimed at the identified multiple intelligences; daily record, noting the changes seen in learning and presents, as a proposal, the use of methodologies and strategies that have been successful. The investigation will come from semi-structured sources, aiming to improve contributions, discussions and resolve concerns found in the school, political and social environment related to improving the teaching-learning process for children with cognitive difficulties. To this end, it is also based on theoretical currents that deal with multiple intelligences, the importance of identifying the intelligences present in these students, the relevance of knowing the process of knowledge construction and, also, for a better understanding and exposure of concepts. about the perception of Autistic people. The Educational Product will be a set of teaching methodologies and strategies to be applied in the researched school.

Key words: inclusive education; multiple intelligences; diversity; inclusion.

ABSTRACT

This project proposes, from the investigation, identification and analysis of information collected, to know and identify actions and attitudes that can improve educational care based on the inclusion and concomitant use of multiple intelligences in students, with Autism Spectrum Disorder (ASD) in the initial grades of Elementary School of schools in the municipal network of Vilhena-RO. Methodologically, this is an action research, a mixed approach: quantitative and qualitative. It uses the instruments of data collection, tests and questionnaires pretests and posttests: multiple intelligence test, applied to students, aiming to identify the types of intelligences present; questionnaire, applied to teachers, to identify difficulties and successes in the care of these students;

learning verification test directed to the multiple intelligences identified; daily record, verifying the changes in learning and presents, as a proposal, the use of methodologies and strategies that were successful. The research will start from semi-structured sources, aiming to improve contributions, discussions and resolve the concerns observed in the school, political and social environment related to the improvement of the teaching process learning g of children with cognitive difficulties. To this end, it is also based on theoretical currents that 1 Project presented POSTGRADUATE PROGRAM IN INCLUSIVE EDUCATION – PROFEI as a partial requirement for entry into the Master of Professional Education. Prof. Guidance Dr. Ivanildo A. Amaral. 2 Project presented GRADUATE PROGRAM IN INCLUSIVE EDUCATION – PROFEI as a partial requirement for admission to the

2 Project presented GRADUATE PROGRAM IN INCLUSIVE EDUCATION - PROFEI as a partial requirement for admission to the master's degree in Professional Education. Guidance Prof. Dr. Ivanildo A. Amaral. 3 Advisor. Member of the Editorial Board of the Revista Científica Multidisciplinar o Saber - RCMOS.

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deal with multiple intelligences, the importance of identifying the intelligences present in these students, the relevance of knowing the process of knowledge construction and for the better understanding and exposition of concepts about autistic perception. The Educational Product will be a set of teaching methodologies and strategies to be applied in the researched school.

Keywords: including education; multiple intelligences; diversity; inclusion.

1. INTRODUCTION

This project: "Education for Inclusion: A Proposal for Improving Assistance in the Use of Multiple Intelligences in Children in the Initial Years of Elementary School" arose from concerns observed and experienced in the school, political, administrative and social space regarding the assistance offered to children with Autism Spectrum Disorder (ASD).

In the theoretical aspect, it stands out for the few publications related to inclusion focusing on multiple intelligences. In practical terms, it proposes a contribution to improving the service provided to students with special educational needs, also benefiting all those who participate in educational practice based on inclusion.

According to Gardner (1995), schools need to overcome the classificatory thinking that IQ can be measured using a numerical scale, and no longer emphasize standardized tests, the search for an average individual and general laws of learning. For Gardner, the school should be remodeled in a way that meets the differences between students, instead of ignoring them, and at the same time guarantees each person the possibility of an education that takes advantage of their intellectual potential.

(...) a growing practice in the country is to use state standardized tests to determine the overall performance of each student, each teacher and each school. (...) standardized tests only show a limited picture of student performance. Still, the practice of standardized testing continues and, in fact, increases. The oppression produced by this narrowly focused practice is widespread. Many schools today focus their curriculum on adapting it to this arguably invalid measure of learning – an action that results in a tiring and monotonous school day for everyone, when the practice of memorization and repetition determines the routine (Gardner, 1995, p 305).

Schools must find ways to successfully educate all children, including those who have special educational needs. Why, education systems must give the highest political and budgetary priority to improving education systems so that they can include all children, regardless of their age, differences or individual difficulties (DELEVATI, 2021).

The educational models applied in Brazilian educational institutions, in Basic Education, do not contribute to solving the educational problems that exist in Brazilian society, such as discrimination against people with physical or cognitive limitations (TELES, 2018). Regarding autism, the WHO points out that,

Autism represents a deviation from the individual's biomedical standard, the definition of its elements must be fundamentally elaborated by those who, due to their qualifications, have the competence to formulate judgments about physical and mental functioning, in accordance with commonly accepted standards (WHO, 1989, p.35).

Silva (2015) states that throughout history, people with exceptional characteristics have received discriminatory treatment.

1.1RESEARCH PROBLEM

How to offer education for inclusion and improved care for children with ASD?

1.2JUSTIFICATION

The relevance of this topic lies in the need to understand, propose and replace, partially or not, the exclusionary methodology with an inclusive methodology and strategies, breaking the paradigm that

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Iinks special education to socialization for a new model that also includes the use and development of skills and competencies considering the multiplicity of intelligence and the peculiarities of each student.

2 THEORETICAL FOUNDATION

According to Silva, Pedro and Jesus (2017), when referring to inclusion policies, as well as their legal

aspects and the need to implement less prejudiced and segregationist practices,

In the last three decades, Brazil has been the scene of a theoretical discussion that was reflected in the approval of legislation aimed at inclusive education, with the main focus being students designated as those with special educational needs. Highlighted here are the 1996 National Education Guidelines and Bases Law and the National Guidelines for Special Education in Basic Education, both in line with both the principles of the 1988 Brazilian Constitution and international documents such as the Jomtien Declaration on Education for All, 1990 and the Salamanca Declaration on Principles, Policies and Practices in the Area of Special Educational Needs, 1994. SILVA, PEDRO E JESUS (2017)

Oliveira, in his reflections, and reinforcing segregationism, points out that people with ASD, prior to 1993, were not even quantified in research. In the same year, they were added, internationally, to the International Classification of Diseases by the World Health Organization (WHO). In Brazil, only in 2022 did autistic people become part of the IBGE demographic census.

According to data from the CDC (Center of Deseases Control and Prevention), an organization linked to the United States government, there is now one case of autism for every 110 people. Thus, it is estimated that Brazil, with its 200 million inhabitants, has around 2 million autistic people. There are more than 300 thousand occurrences in the State of São Paulo alone. (OLIVEIRA, 2018)

Educational inclusion is a way of responding to and addressing diversity in the educational context; seeks to promote the expansion and democratization of training opportunities, within the framework of the concept of lifelong learning and as a right; which implies a learning environment that promotes the comprehensive personal, academic and professional development of all students, regardless of ethnicity, social class, gender, special needs, religion, culture, sexual preference or learning styles (HATTGE; SANTOS ; COSTA, 2020).

Social interaction is inherent to human beings. Isolation, as well as exclusion, cause emotional and psychological damage. Glat and Blanco highlight: "The interactive character emerges in the subject's relationship with new learning. The special educational need manifests itself in the individual and subjective action of knowing/learning new social 'content'. (GLAT; BLANCO, 2007, p.6).

The learning process is individual. Considering the multiplicity of intelligences is an important aspect on this path. The peculiarities of each student must be valued and respected without segregating people with cognitive difficulties. Equal and humane treatment must come from all sectors of society, primarily from public bodies and political and state authorities, breaking with the fallacy that the "inclusion" that is practiced today is differentiated service in Brazil. Including does not imply mere interaction with others, it also encompasses the development and evolution of skills and competencies.

This change of perspective is decisive, because when considering that the **Special educational needs are found in the relationship between the student's teaching-learning process and the curricular proposal** we divert the focus of attention, previously centered on the student's difficulties, directing it to the educational answers that the school needs. (GLAT and BLANCO 2007, p. 6, emphasis added).

The United Nations Educational, Scientific and Cultural Organization (UNESCO) considers that special attention should be given to all individuals and groups who cannot exercise their right to education - aiming seek to develop the full potential of each person. Inclusive, quality education is the right of all students to receive education that meets their basic learning needs and enriches their lives (UNESCO, 2019).

The Salamanca Declaration makes this aspect clear when it states that "all children [...] have a fundamental right to education and that they must be given the opportunity to obtain and maintain an acceptable level of knowledge. (UNESCO, 1994, p. 10).

Orrú (2017) indicates that inclusion is the transformation of educational systems and cultures, as well as educational practices and the organization of schools in order to meet diverse educational needs



of students, so that the learning and full participation of each child can be achieved.

School inclusion must be anchored in three interrelated aspects, namely: a) the *presence*of the student at school, replacing the isolation of the private family environment with their inclusion in a public space for socialization and learning; b) your *participation*effective in all school activities, which does not only depend on 'stimulation' from colleagues and teachers, but on the provision of accessibility conditions and curricular adaptations that are necessary; and c) the *knowledge construction*, the primary function of the school, and the goal to be pursued during the inclusion process. (Ainscow, 2004, p.345)

Autism is a condition that affects the lives of thousands of people around the world. According to Ferreira and

Guimarães (2023), humanity has always sought explanations for what is "different", as a product of discrimination and segregation.

(...) men were building their existence and satisfying their basic needs, always seeking explanations for natural phenomena, life and death, health and illness, their birth, growth and development, also seeking to understand autism (p.49).

Ferreira and Guimarães (2003), citing Rubem Alves (1998), shows us that the perception of others is what

stigmatizes and hurts. "If everyone were blind, then the difference wouldn't hurt so much. It hurts because, in the astonishment in other people's eyes, the stigma-curse is marked: you are different. Equality is something everyone wants", (p.73).

People with ASD are still marked by discrimination and segregation because they do not meet the demands of cultural standards related to the current form of social organization.

According to Gardner, these seven intelligences manifest in humans, but they differ in the degree to

which they are evident. The essence of the theory of Multiple Intelligences is to respect the differences that

exist between individuals, defending multimodal teaching in which children also learn from experiences. If I had not worked with these populations – normal and gifted children and those who had been normal and suffered brain damage – I would never have conceived my theory of multiple intelligences (MI, as it came to be called later) (...), all days when I worked, I would contact **clear exceptions**to this orthodoxy. I met individuals with brain damage whose language had been severely impaired but who managed to perform well in unfamiliar contexts; I observed patients with brain damage who had spatial difficulties, but who were able to perform all types of linguistic tasks. (GARDNER, 2010, p. 17. Our emphasis)

Finally, it is worth clarifying that the use of multiple intelligences can be improved in a natural and healthy way in children, allowing their development without forcing them.

The theory of Multiple Intelligences consists of a new position in relation to the teaching-learning process proposed by Howard Gardner, based on Piaget's psychology. This new position discards the intelligence quotient number and defends yet another multiple intelligence that includes up to seven dimensions: the linguistic dimension, the logical-mathematical dimension, the visual-spatial dimension, the corporal-kinesthetic dimension, the musical dimension, the intrapersonal and interpersonal dimension, and the naturalistic dimension. (VERI, 2018).

From these conceptions, a new perspective for teaching action emerges: evaluator of interests and skills, student-curriculum manager, school-community manager, process coordinator and supervisor of the student-evaluation-curriculum-community balance (ANTUNES, 2015).

3 OBJECTIVES

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3.1 GENERAL OBJECTIVE

Understand the educational model and strategies, aiming to improve educational inclusion with better use of the multiple intelligences of students with ASD.

3.2 SPECIFIC OBJECTIVES

- Identify the level of multiple intelligences in the students in the sample;
- Know the methodologies applied by the teaching staff, which resulted in success or failure in serving students who have ASD;
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• Check students' performance in applying the test aimed at different intelligences; Prepare a proposal, with a set of methodologies and strategies, which were applied and obtained better results.

4 HYPOTHESES

- Socialization, which is not segregated, provides opportunities and stimulates, through coexistence in the classroom, better learning;
- Differentiated treatment, offered by caregivers/auxiliary teachers, contributes to learning;
- The service, focused on the use of specific and highlighted intelligence, produces greater/better results;
- Skills and competencies can be better developed through the best use of outstanding intelligence.

5 METHODOLOGICAL PROCEDURES

The study will be carried out at the Martim Lutero Municipal Elementary School, located on Rua 519, n° 730, Jardim América neighborhood, in the city of Vilhena, Rondônia. The study population will be made up of students in the initial grades of Elementary School with ASD.

The quantitative approach will be used through the following instruments:

- Test applied to students to identify or locate multiple intelligences, applied to students with ASD;
- Questionnaire applied to teachers to understand the difficulties and successes in serving students with ASD;
- Verification test aimed at students with identified multiple intelligences;
- Daily record, containing changes in learning.

The analysis of results will be done by tabulating the data obtained in the questionnaires and presented, in a visual and graphical way, with their respective percentages and representativeness of each question or question item.

6 DESCRIPTION OF THE EDUCATIONAL PRODUCT

The Educational product, as a legacy of this research, consists of a set of teaching methodologies and strategies, to improve educational services for children in the initial grades, teaching fundamental, based on the inclusion and use of multiple intelligences in students with IDD Autistic Spectrum (ASD) to be presented in municipal schools in Vilhena RO.





7 ACTIVITY SCHEDULE

	2023													2024
ACTIVITIES	Ten	Jan	Feb	Sea	Apr	May	June	Jul	Aug	Set	Oct	Nov	Ten	Jan
Research project				1	1			I	I			I	I	
Bibliographic survey	Х	Х												
Registration of publications/texts	Х	Х												
Project preparation	Х	Х												
Project Delivery		Х												
Observation Planning						,								•
Sample - Sample identification and construction			Х											
Techniques - Preparation of			Х											
quizzes and tests														
Initial observation – Pre-test														
Organization of the itinerary				Х										
Field research - Application of questionnaire/tests (pre-test)				X										
Data collect				Х	Х	Х	Х	Х	Х					
Description														
Description/Tabulation/Treatment									Х					
of the data														
Analysis description									Х					
Initial observation – Post-test														
Organization of the itinerary										Х				
Field research - Application of										Х				
questionnaire/tests (post-test)														
Interpretation														
Interpretive analysis										Х	Х			
Conclusions										Х	Х			
Final report														
Final writing of the dissertation											Х	Х	Х	Х
Text review												Х	Х	Х
Presentation/Defense														Х
Review/Final writing/Delivery														Х

REFERENCES

AINSCOW, M.**What does inclusion mean?**Available at: http://www.crmariocovas.sp.gov.br. Accessed on: 24 Jul. 2004.

ANTUNES, Celso. Multiple Intelligences and their stimuli. São Paulo: Papirus, 2015.

DELEVATI, Aline de Castro.**The national special education policy from the perspective of inclusive education** (2007-2018):challenges for the establishment of inclusive educational systems in Brazil. Thesis (Doctorate in Education) – Federal University of Rio Grande do Sul, Porto Alegre, 2021. Available at: https://www.lume.ufrgs.br/handle/10183/221552. Accessed on December 30, 2022.

FREITAS, Marcos Cezar.**Disabilities and diversities**: inclusive education and the school floor. São Paulo: Cortez, 2022.

GLAT, R.; BLANCO, L.de MV Special education in the context of inclusive education. In: GLAT, R. (Org.). **inclusive education**: culture and school daily life.Rio de Janeiro: Ed. Sette Letras, 2007.



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RCMOS –Multidisciplinary Scientific Journal O Saber -*Multidisciplinary Scientific Journal Know* **JISSN: 2675-9128. Sao Paulo-SP.**

HATTGE, Morgana Domenica; SANTOS, Francieli Karine dos; COSTA, Daniel Marques.**School inclusion**: a teacher training itinerary. Lajeado, RS: Univates, 2020.

SMOLE, Kátia Cristina Stocco Multiple Intelligences in School Practice/ Kátia Cristina Stocco Smole -Brasília: Ministry of Education, Secretariat of Distance Education, 1999. 80 p. ; 16 cm. - TV Escola notebooks.**Multiple Intelligences.**

ORRÚ, Silvia Ester.**The re-inventing of inclusion**: the challenges of difference in the process of teaching and learning. Petrópolis, RJ: Vozes, 2017.

OLIVEIRA.**A Portrait of Autism in Brazil.**Open Space Magazine. Available at: http://www.usp.br/espacoaberto/?materia=um-retrato-do-autismo-no-brasil Accessed on: 16 Jan. 2023.

WHO, **World Health Organization**. 1989. Available at: <www.brasil.gov.br/.../oms> Accessed on: 16 Jan. 2023.

SILVA, Jocenir de Oliveira.**inclusive education**: the strange need for policies to include people. Thesis (Doctorate in Social Service) - Pontifical Catholic University of Rio Grande do Sul, Porto Alegre, 2015. Available at: https://tede2.pucrs.br/tede2/bitstream/tede/6335/2/475283%20Texto%20Completo .pdf Accessed on December 29, 2022.

TELES, Larissa Sampaio.**The right to inclusion of people with disabilities in the school environment**: an analysis of the national inclusive education policy. Dissertation (Masters in Law) - Federal University of Uberlândia, 2018. Available at (https://repositorio.ufu.br/bitstream/123456789/21835/3/DireitoInclus%C3%A3oPessoa. pdf. Accessed on 29 Dec. 2022.

UNESCO.**Salamanca Declaration and line of action on special educational needs**. Brasília: CORDE, 1994.

UNESCO, United Nations for Education, Science and Culture.**Manual to ensure inclusion and equity in education**. Brasília: UNESCO, 2019.

VERI, Carolina B.**Multiple intelligences for all learning**. Joinville, SC: Clube de Autores, 2018.

