

# Double Excepcionality From The Perspective Of Training Pedagogy Graduates

Dupla Excepcionalidade na Perspectiva da Formação dos Graduandos de Pedagogia.

La doble excepcionalidad desde la perspectiva de los estudiantes de grado en Pedagogía de la Formación

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**Abstract :** This work deals with the importance of studying double exceptionality in the initial training of graduates in Pedagogy who will teach in Kindergarten and in the early years of Elementary School. The objective of this bibliographical research is to present an overview of the teaching programs of five disciplines of four different undergraduate courses in pedagogy that cover contents about students who need specialized educational assistance, aiming to detect topics related to double exceptionality. In particular, high abilities/giftedness (HA) and autism spectrum disorder (ASD). In addition, it is hoped that this work can contribute to analyze the initial training of graduates in Pedagogy with regard to the specialized educational care of students with AH/SD. It is concluded that the syllabuses of the analyzed disciplines do not contemplate with desirable depth this theme considered and that there is a need for a multidisciplinary look on the double exceptionality in the educational field.

# Keywords: HIGH ABILITIES, GIFTEDNESS, TEACHER EDUCATION.

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## Introduction

In recent years, there has been a growing number of research related to students with special educational needs (Alves & Nakano, 2015; Hakim, 2016; Vilarinho-Rezende et al 2016), including students with high abilities/giftedness (HA) coexisting with some condition, at first sight, not compatible with gifted people, that is, students with double exceptionality.

The double exceptionality, according to Alves and Nakano (2015, p. 347) can be defined as the existence of high performance, talent, ability or potential, occurring concomitantly with a psychiatric, educational, sensory and physical disorder. This subject has been increasingly established in an area of great interest in scientific research, even with few studies in Brazil, and has been considered of great relevance for a greater understanding of students with specialized educational needs.

The process of initial training of the teacher who teaches in Early Childhood Education and in the early years of Elementary School is a topic that generates many questions in the educational field. There are several discussions regarding the way that the contents related to the attendance of students with special educational needs are approached in the undergraduate courses in Pedagogy.

The process of training graduates in Pedagogy who will teach classes in Early Childhood Education and in the early years of Elementary School encompasses the function of preparing these future teachers in relation to teaching students with some special educational need. Among them, for example, are students with high abilities/giftedness (HA), with autism spectrum disorder (ASD) and with attention deficit hyperactivity disorder (ADHD).

The relevance of specialized educational services for students with special needs has been recognized in Brazil since 1971 by the Law on National Education Guidelines and Bases, Law n<sup>o</sup>. 5. 692. According to this federal law, students with high abilities/giftedness are those who demonstrate high performance or potential in one or more of the following areas: general intellectual ability, specific academic ability, creative or productive thinking, leadership ability, arts, music, or psychomotor skills.

In 1973, the National Center for Special Education (CENESP) was created, responsible for supervising Special Education in Brazil. The center promoted educational actions aimed at people with disabilities and people with high abilities/giftedness, but still configured by assistance campaigns and isolated State initiatives.

Thinking about Inclusive Education, Resolution CNE/CP n° 1/2002, which establishes the National Curriculum Guidelines for the training of Basic Education teachers, defines that higher education institutions must foresee, in their curricular organization, teacher training aimed at attention to diversity and that includes knowledge about the specificities of students with special educational needs. Including students with high abilities/giftedness.

Specifically in relation to HA, in 2005, Centers for Activities of High Skills/Giftedness (NAAH/S) were implemented in all Brazilian states and in the Federal District. /giftedness for specialized educational service, for guidance to families and the continuing education of teachers, establishing the organization of the Inclusive Education policy in order to guarantee this service to students in the public school system.

According to Wechsley and Suarez (2016, p.42), the proposal of the NAAH/S, in addition to providing teachers with the formation of new teaching strategies to motivate students with AH, is to include parents in care groups so that they can becomes more vigilant to the special needs of their children.

The Education Development Plan (PDE) was launched in 2007, reaffirmed by the Social Agenda, having as axes the training of teachers for Special Education, the implementation of multifunctional resource rooms. In addition, there was also the publication of four volumes entitled "The construction of Educational Practices for Students with High Abilities/Giftedness". Wechsley and Suarez (2016, p.42) corroborate Freeman and Güenther (2000) when the authors state that these and other publications demonstrate the importance of psychological monitoring and stimulation of the development of human talent.

For the well-being and performance of students with AH, teacher education plays an important role. Wechsley and Suarez (2016, p.42) state that for Delou (2012), as long as there are no trained teachers, little progress will be made in fulfilling the educational rights of these students. Furthermore, for Güenther (2006) teacher training is the most important aspect for the success of programs for HA students. Since the teacher is the one who sets the environment, who either inspires or devastates the student's self-confidence.

Although the idea of HA is closely based on the most relevant capabilities that a person can present, it is possible to find cases in which some disorder is also diagnosed, such as ASD and ADHD. It is noticed that few teachers are prepared to work with students who have high abilities/giftedness in some area and with some kind of deficit. In this sense, this work will consider the situation in which a student with AH is also diagnosed, with Asperger syndrome (AS), in ASD, that is, the double exceptionality.

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder. According to the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), ASD is characterized by significant impairment in social interaction, associated with deficits in verbal and non-verbal communication, as well as clinical manifestations related to restricted patternand repetitive stereotyped behaviors, inflexible, directed to specific and routine interests, activities and actions (American Psychiatric Association - APA, 2014).

According to Cardoso and Pitanga (2020, p. 127), the difficulties of ASD "are present in multiple contexts, and can be manifested currently or by previous histories, causing, throughout the individual's life, impairments in personal, family, academic, social and professional.

Hakim (2016, p. 72) cites the authors Camargos et al. (2013) to conceptualize Asperger syndrome as an autistic spectrum disorder (ASD) in which, in the patient's previous history, there is no degree of delay in psychic development, present in classic autism and is considered a behavioral syndrome.

It is worth mentioning that Asperger syndrome no longer appears as a distinct diagnosis of ASD in the DSM-V, but still appears in the classification of mental and behavioral disorders of the ICD-10 (World Health Organization Geneva - WHO, 1993, p. 252), being defined as "a disorder of uncertain nosological validity characterized by the same type of qualitative abnormalities of reciprocal social interaction that typifies autism, together with a restricted and repetitive repertoire of interests and activities". The document further mentions that Asperger's syndrome differs from autism "primarily in that there is no global delay or delay in cognitive or language development." In addition, it states that most individuals with Asperger's syndrome are of normal global intelligence, but it is common for them to be distinctly clumsy.

It is worth mentioning that all the references used in this research are appreciating the double exceptionality, considering high abilities/giftedness coexisting with Asperger syndrome, which from the

DSM-V appears within the ASD. Thus, in some citations there is mention of Asperger syndrome and at other times only ASD may appear, in which case it is considered a support level 1 autistic without delay or global delay in cognitive or language development. There is a growing concern of parents and teachers about double exceptionality, particularly for early and adequate diagnosis and intervention. Parallel to this, there is a lack of discussions in the process of initial and continuing training of teachers who will teach classes in Early Childhood Education and in the early years of Elementary School.

In this sense, the objective of this work is to present a scenario of the teaching programs of five subjects of four different degree courses in pedagogy that cover contents about students who need specialized educational assistance, aiming to detect the topics related to the double exceptionality, in particular, HA and ASD. The subjects in question are named Inclusive Education, Fundamentals of Inclusive Education, Special Education, Special Education – School Fundamentals, Policies and Practices, and Integrated Teaching Internship Project in Special Education. In addition, it looks forward to collaborating to answer the following question: How is the initial training of graduates in Pedagogy who will teach classes in Early Childhood Education and in the early years of Elementary School with regard to the double exceptionality, in particular, AH what about Asperger's syndrome (which is found in ASD)?

In order to carry out this work, a bibliographic research was used, based on normative documents, articles and books that deal with the studied topic and the analysis of five menus of the disciplines Inclusive Education, Fundamentals of Inclusive Education, Special Education, Special Education - fundamentals, school policies and practices and Integrated teaching internship project in Special Education for four Pedagogy courses at public universities in São Paulo. Each discipline is mandatory and biannual in the Pedagogy undergraduate course in which it is inserted. The analysis of the results was based on the objectives and syllabus of each teaching program of the subject considered.

## High abilities/giftedness and autism spectrum disorder: the double exceptionality

The dual exceptionality in the area of high abilities/giftedness is a topic that has aroused the interest of scholars, family members and teachers who live with gifted people. Currently, according to Hakim (2016, p.65) studies are aimed at identifying and recognizing students with HA and ADHD and students with HA and AS. It is worth mentioning that this work will only address the double exceptionality HA and SA. Vilarinho-Rezende et al. (2016, p. 64) cite Guimarães and Alencar (2012) to state that there is a significant amount of individuals with Asperger's syndrome who have an intellectual level above the average, thus being diagnosed as gifted with Asperger's syndrome, that is, with double exceptionality.

To work with students who have the double exceptionality in question, it is necessary that teachers have in-depth knowledge both about HA and ASD, as well as about the characteristics that differentiate them. In this way, there is a greater possibility of building an inclusive education respecting the characteristics of students.

The chart below explains nine characteristics that distinguish HA from HA with AS, described by Neihart (2000) and presented by Vilarinho-Rezende et al. (2016, p. 65).

High abilities/giftedness (HA)	HA with Asperger's syndrome
Normal speech pattern but may have more advanced language for their age.	Speaks pedantic and without connections.
They usually passively resist routine, and often accept it.	Low tolerance for routine change.
They are aware that they are different.	They have a low level of consciousness that they are different.
Attention, when disturbed, is by external stimuli.	Attention, when disturbed, is by internal stimuli.
Engage in socially reciprocal humor.	Despite being able to play word games, they do not understand humor that requires social reciprocity.
Good discernment.	Discernment absent.
Motor clumsiness less frequently.	Motor clumsiness more often.
Inappropriate affectivity less frequently.	Inappropriate affectivity more often.
Stereotyping less frequently.	Stereotyping more often.

Chart 1. Characteristics that distinguish HA from HA with Asperger's syndrome, according Neihart (2000).

Source: Vilarinho-Rezende et al. (2016, p. 65). Prepared by the author.

Regarding the academic performance of students with double exceptionality, Vilarinho-Rezende et al. (2016, p. 66) mention the authors Assouline et al. (2009) and Foley-Nicpon et al. (2012) to state that "gifted individuals with either Asperger syndrome or high-functioning autism exhibit good performance in the areas of reading, mathematics, written language, and oral language with above-average scores".

Furthermore, according to Assouline et al. (2009) people with dual exceptionality can present excellent performance in language, narrative and memorization. "However, they express some problems regarding performance in attention, inhibitory behavior, memory for faces and recognition of

emotions when compared to giftedness without any disorder.", according to Vilarinho-Rezende et al. (2016, p. 66).

It should be said that there is no single profile of students with HA, nor is there a single profile of students with HA and Asperger's syndrome. In view of the above, one can see the importance of addressing more the double exceptionality throughout the training of undergraduates of pedagogy. It is in this context that the present work presents an overview of teaching programs of subjects from different pedagogy degree courses that cover contents about students who need specialized educational assistance, aiming to point out the topics related to the double exceptionality.

## Methods

In order to carry out this work, a bibliographic research was used, based on the analysis of five menus of the disciplines Inclusive Education, Fundamentals of Inclusive Education, Special Education, Special Education - school fundamentals, policies and practices and Integrated Project of teaching internship in Special Education for four Pedagogy Licentiate courses at public universities in São Paulo. Each discipline is mandatory and biannual in the Pedagogy undergraduate course in which it is inserted. The analysis of the results was based on the objectives and syllabus of each teaching program of the subject considered.

Course	Disciplines	Workload	Last update of the teaching program
А	Inclusive Education	68	2013
В	Fundamentals of Inclusive Education	75	2017
С	Special Education	60	2017
D	Special Education - school fundamentals, policies and practices	60	2020
D	Integrated Project of teaching internship in Special Education	90	2020

Source: author.

It is worth mentioning that the subjects Special Education – Fundamentals, Policies and School Practices and Integrated Project of Teaching Internship in Special Education are carried out together in the evaluated D course. In the other courses considered, there is no pre- and co-requirement for the

subjects Inclusive Education, Fundamentals of Inclusive Education and Special Education. These disciplines are also not carried out in conjunction with any other discipline associated with the teaching internship.

## **Results and discussion**

The process of training teachers with regard to the educational inclusion of students with double exceptionality is essential. Hakim (2016, p. 91) states that Alencar (2001) reiterates that it is essential that the teacher is better equipped to provide a good quality education, taking into account individual differences and encouraging the development of talents, competences and diverse abilities.

Lopes et. al. (2014, p. 41) agree with Alencar and Fleith (2001), when the authors affirm that the educational proposals to be effective must consider the cognitive, academic, affective and social areas; the existence of a partnership between family and school and the offer of a variety of modalities of school attendance.

The menus of the analyzed subjects do not cover in depth the desirable contents in the initial training of teachers who will be able to work with students with double exceptionality, since there are few topics mentioning high skills/giftedness and ASD in Early Childhood Education or in the early years of Elementary School. In addition, no program explicitly covers the possibility of student coexistence with HA and ASD. Chart 3, below, presents the objectives and syllabus of the Inclusive Education discipline of course A, whose workload is 68 semester hours.

Objectives	Program Content
To analyze the conceptual issues (philosophical -ethical-political) related to the process of educational inclusion.	Historical and conceptual aspects of the inclusion process.
Propose pedagogical alternatives (programs and actions) for the educational assistance of students with special educational needs (SEN) in the classroom.	Characterization of different types of disabilities, high abilities and typical behaviors.
Debate the theoretical and practical assumptions that involve the construction of an inclusive education	Policies for serving students with special educational needs.
-	Curriculum concepts considering the diversity of students with SEN at school.
-	Inclusive Education and educational action: necessary supports and intervention strategies.

Chart 3. Objectives and Program Content of the Inclusive Education discipline

Source: author.

It is observed that in the syllabus of the Inclusive Education discipline of course A, the characterization of different types of high abilities and disabilities is mentioned, in particular ASD. It

also mentions the policies of assistance to students with SEN and curriculum conceptions considering the diversity of students with SEN. In this case, there are possibilities for the student with double exceptionality to be included and the topic to be treated with more specificity, but when we look at the proposed bibliographic reference there is no allusion that this actually happens, since the suggested bibliographic references do not present any specific literature on the double exceptionality, in addition to the normative documents that deal with the subject in question.

The subject Fundamentals of Inclusive Education of course B aims to understand the concept of Inclusive Education and its implications for the school context. Chart 4, below, presents the specific objectives and syllabus of the Fundamentals of Inclusive Education discipline, whose workload is 75 semester hours, with 60 theoretical hours and 15 practical hours.

Objectives	Program Content
Know the history of disability.	Views on Inclusive Education (the relationship between normality and exceptionality; the issue of labeling stigma, multiculturalism/diversity; inclusion/integration in school institutions).
Differentiate the concept of integration and inclusion.	Demystifying disabilities (The history of disability in the world and in Brazil; types of disabilities and their possible causes; diversities in school institutions).
Identify the principles and concepts that underlie the inclusive education/education for all perspective.	Daily school life (Learning for students with different educational needs; inclusive teacher training, digital technologies and school inclusion).
Contribute to a broader view of the topic and possible strategies in the daily life of the classroom.	-
Guidance in relation to the school attendance of students with special needs.	-
Enable reflection on teacher training in the context of Inclusive Education.	-
Understand and lead the discussions of diversity in school, respecting the differences of different natures.	-

Chart 4. Objectives and Program Content of the Fundamentals Inclusive Education discipline

Source: author.

Chart 5, below, presents the objectives and Program Content of the Special Education discipline of course C, whose workload is 60 semester hours.

Objectives	Program Content
To analyze the historical panorama of Special Education from antiquity to the present.	The historical relationship between society and disability Legal Contextualization and Public Policies: Special Education X Inclusive Education.
Relate this panorama to Brazilian historical landmarks and public policies.	The historical relationship between society and disability Legal Contextualization and Public Policies: Special Education X Inclusive Education.
Discuss the concept of Inclusive Education and its implication in the school.	School inclusion and specialized educational assistance (AEE).
To analyze public policies related to Special Education and Inclusive Education	Hearing impairment/deafness: oral approach and adaptations to access the curriculum.
To know, in an elementary way, the special educational needs regarding the etiology, prevention and modalities of educational resources available for students with Hearing Impairment/Deafness, Visual Impairment/Blindness, Physical Disability, Intellectual Disability, Pervasive Developmental Disorder and high abilities/giftedness (Special Education target audience).	Hearing impairment/deafness: bilingual approach and adaptations to access the curriculum.
-	Visual impairment/blindness and adaptations of access to the curriculum.
-	Physical disability and adaptations of access to the curriculum.
-	Intellectual disability and adaptations of access to the curriculum.
-	High abilities/giftedness and adaptations of access to the curriculum.
-	PDD – pervasive developmental disorder and adaptations of access to the curriculum.
Source:	author

Chart 5. Objectives and Program Content of the Special Education discipline

It is observed that in the syllabus of the Inclusive Education discipline of course C, the need to know, in an elementary way, the special educational needs regarding the etiology, prevention and modalities of educational resources available to students of the target audience of Special Education, in particular for students with high abilities/giftedness and Pervasive Developmental Disorder (PDD), in particular AS and ASD. In addition, it also deals with the adaptations of access to the curriculum in relation to HA and PDD.

It is worth mentioning that among the analyzed subjects, Inclusive Education of the C course is one of the subjects that most specifies the content on high skills/giftedness and PDD, but it is mentioned in the teaching program that this happens in an incipient way. In addition, in the proposed bibliographic reference there is no indication of more detailed teaching material on double exceptionality.

Chart 6, below, presents the objectives and Program Content of the Special Education subject -Fundamentals, Policies and School Practices of the D course, whose workload is 60 semester hours, with 20 hours considered as practices for curricular components.

Objectives	Program Content
Provide the student with knowledge about the principles and concepts that have historically delineated the field of special education.	Principles, concepts and conceptions that make up the field of special education.
To present the legal guidelines of the Brazilian educational policy aimed at serving students with disabilities, global developmental disorders and high abilities/giftedness, as well as their analysis from the perspective of the right to education.	Educational policies, legislation, recommendations and international declarations that discipline and guide Brazilian special education.
Get to know programs, actions and pedagogical alternatives developed in the schooling process of students with disabilities, global developmental disorders and high abilities/giftedness.	Programs and actions of Brazilian education systems for specialized educational services.
Provide the student with contexts and subsidies for the improvement of their scientific thinking and written production, based on pedagogical praxis, favored by the internship situation.	Pedagogical practices and the role of the specialized teacher in different services and ways of providing specialized educational care for students with disabilities, global developmental disorders and high abilities/giftedness.

Chart 6. Objectives and Program Content of the Special Education subject - Fundamentals, Policies and School Practice

-	Special education, inclusive education and implications for teacher training.
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## Source: author.

It is observed that in the syllabus of the discipline Inclusive Education – Fundamentals, Policies and School Practices of course D, the theme referring to practices schooling and care for students with high abilities/giftedness pervasive developmental disorders, in particular AS and ASD. In the recommended bibliographic reference there is no indication of didactic material that addresses the double exceptionality in question.

Chart 7, below, presents the objectives and Program Content of the discipline Integrated Project of Teaching Internship in Special Education of the D course, whose workload is 90 semester hours, with 60 hours destined to the internship.

Chart 7. Objectives and Program Content of the discipline Integrated Project of Teaching Internship in Special	
Education	

Objectives	Program Content
To approach the applied part of the compulsory subject Special Education-fundamentals, policies and school practices whose premise in its program is the right of everyone to school education, with the guarantee of access and permanence to quality education that respects differences.	Elements for the identification of different educational spaces and educational services that serve the target audience of special education.
Provide students with experiences in different formal education spaces that serve the target audience of special education, in an inclusive perspective, preferably in public institutions of regular education, in order to create articulations between legislation, policy, fundamentals, aspects methodologies and pedagogical practices.	References for mapping the different educational spaces and educational services that serve the target audience of special education, in order to know their surroundings, the school community, the guiding documents.
-	Construction of indicators referring to the realization of the right to education by the target audience of Special Education in different educational spaces
-	Establish internship project.
-	Guidance and monitoring of project development.

-	Preparation of a report and feedback on the internship for the unit in which it was carried out.
Source: author.	

Among the analyzed courses, course D is the only course that presents an internship discipline together with a theoretical discipline that covers students who are the target audience of special education. It is important to say that the suggested bibliographic references do not present any specific literature on the double exceptionality, in addition to the normative documents that deal with HA.

#### Conclusion

It is observed that the theme of dual exceptionality in the area of high abilities/giftedness is a recent field of study in Brazil. Research in general deals with the identification of students with AH and with AS or ASD and on the specialized educational care of these students, but does not cover studies with the coexistence of these two situations. Therefore, there is little material that deals with the initial and continuing teacher training of teachers who will teach in Early Childhood Education or in the early years of Elementary School addressing the issue of double exceptionality.

In general, the subjects aimed at teaching students who need specialized educational assistance in the undergraduate courses in Pedagogy analyzed do not address in depth the desirable contents in the initial training of teachers who will be able to work with students with AH, SA or ASD. in Early Childhood Education or in the early years of Elementary School. In addition, the suggested bibliographic references do not present any specific literature on the dual exceptionality in the area of high abilities/giftedness.

It should be noted that the courses analyzed usually do not have a practical discipline to cover students who are the target audience of special education, in particular, students with double exceptionality. The exception is course D, which has a subject Integrated Project of Teaching Internship in Special Education, but the teaching program of the subject does not make it very clear that specific attention is given to students with double exceptionality, since this topic is not mentioned on the menu.

In view of the training of early childhood education teachers and the early years of Elementary School, it is noted that there are many challenges to identify a student with an indication of double exceptionality and to implement specialized educational service for these students, the target audience of special education. Having as a premise the right of everyone to school education, with guaranteed access and permanence to quality education that respects differences.

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