# Luso-Brazilian Comparative Study on Initial Education of Teachers IN HIGH ABILITIES/GIFTEDNESS¹ WITH FOCUS ON CURRICULAR CONTENTS²

Estudo Comparativo Luso-Brasileiro sobre a Formação Inicial de Professores em Altas Habilidades/Superdotação com Enfoque nos Conteúdos Curriculares

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ABSTRACT: Students with high abilities/giftedness are part of the target public of Special Education. Thus, their particularities require educational measures appropriate to the maximum development of their potential, involving planning and implementation of pedagogical strategies consistent with the needs of students, pointing to the need for teacher education. From this perspective, it is considered essential that the educator has knowledge about the subject with high abilities/giftedness so that he/she can develop practices that favor the growth of students' potentials and abilities. Thus, this paper aimed to analyze the curricula of teacher education that will work with children from three to 10 years of age in two public universities, one Brazilian (Universidade Estadual Paulista 'Júlio de Mesquita Filho', UNESP, Marília Campus) and another, Portuguese (Universidade do Minho, UMinho, Gualtar Campus). The purpose is to verify whether or not high abilities/giftedness constitute a disciplinary content in the initial education offered. From the analysis of the teaching plans of the disciplines, there were indications that this theme is addressed in the course of Pedagogy of UNESP and in the Masters' in Teaching of UMinho. In view of this, the intention is to continue this investigation in order to confirm these results through interviews with the professors and students of these universities.

KEYWORDS: Teacher education. Curricula. High abilities. Giftedness. Special Education.

RESUMO: Alunos com altas habilidades/superdotação (AH/SD) fazem parte do público-alvo da Educação Especial. Assim, suas particularidades requerem medidas educacionais apropriadas ao desenvolvimento máximo de suas potencialidades, envolvendo planejamento e implementação de estratégias pedagógicas condizentes com as necessidades dos estudantes, o que perpassa pela necessidade de formação de professores. Nessa perspectiva, julga-se imprescindível que o educador possua conhecimentos sobre a temática das AH/SD para que possa desenvolver práticas que favoreçam o crescimento dos potenciais e das habilidades dos alunos. Desse modo, este artigo teve por objetivo analisar os currículos da formação de professores que atuarão junto a crianças dos três aos 10 anos de idade, em duas universidades públicas, uma brasileira (Universidade Estadual Paulista "Júlio de Mesquita Filho"; UNESP, Campus de Marília) e outra portuguesa (Universidade do Minho; UMinho, Campus de Gualtar). O intuito é verificar se as AH/SD constituem, ou não, um conteúdo disciplinar presente na formação inicial oferecida. A partir da análise dos planos de ensino das disciplinas, encontraram-se indícios de que tal temática é abordada no curso de Pedagogia da UNESP e nos Mestrados em Ensino da UMinho. Pretende-se, dessa maneira, dar continuidade a essa investigação a fim de confirmar esses resultados a partir de entrevistas com os docentes e estudantes dessas universidades.

PALAVRAS-CHAVE: Formação docente. Currículos. Altas habilidades. Superdotação. Educação Especial.

<sup>&</sup>lt;sup>1</sup> Although Brazil and Portugal use different terms - Brazil: superdotação, dotação, talento, altas habilidades, altas habilidades/ superdotação, altas habilidades/superdotação; and, in Portugal, there is a greater predominance of the term sobredotação to refer to people with higher potential or performance; in this text, the corresponding terms in English will be used - high abilities and giftedness - when referring to both contexts.

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## 1 Introduction

Inclusive Education is a dynamic process that requires school restructuring in the organizational and pedagogical spheres. In order to provide access to education for all, it is essential that the conditions for students' learning and social integration are guaranteed (Fonseca-Janes & Omote, 2013).

Although Inclusive Education does not exclusively involve students belonging to the Special Education public, it is common for this type of education to be associated with people with some type or degree of disability. However, Special Education is also intended for students with high abilities/giftedness (HA/GD) and those with global developmental disorders (Lei nº 9394, 1996), as well as other personal singularities that affect the pace and volume of learning in the regular classes. Thus, the object of this study is the thematic of high abilities/giftedness (HA/GD).

Students of this modality have always been in regular schools. However, to this day, there are few who enjoy the rights of full development and a learning according to their characteristics and needs. Basically, their superior capacities and potentialities are not identified or assisted by schools and teachers (Pérez & Freitas, 2011), when we know that these students present abilities that surpass the average of their peers and develop their cognitive functions earlier and more quickly (Garcia-Santos, Almeida, & Cruz, 2012).

The intellectual differences regarding the student with academic HA/GD require specific educational needs. In general, they demand greater challenges and more depth in the area(s) in which they excel. However, while students with poor academic performance are quickly identified and referred to specialized educational services, students who stand out for their potential receive little support to achieve maximum development. This lack of attention has been pointed out in literature with the consequence of lowering of their expectations and level of production (Guenther, 2012; Maia-Pinto & Fleith, 2004).

Studies suggest that psychological characteristics cannot be assumed as fixed and stable traits. These traits, understood here as potentialities, do not guarantee high achievement and excellence in adult life (Garcia-Santos et al., 2012). This developmental situation of high abilities draws attention to two educational points of surveillance: (i) attention and stimulation favorable to the development and expression of such potentialities; and (ii) caution in relation to the expectations that are created, since they can become 'prophecies' that favor experiences ruled by great anxiety and disappointment, potentially becoming concretized.

The HA/GD thematic is a very recent field of research in Portugal. The appearance and the study of the subject date from the decade of 1980 and count on little support of the academic world, since they happen mainly through the protagonism of the parents and their associations (Miranda & Almeida, 2010). In Brazil, there is evidence that the first educational service to this public occurred in 1929, in the state of Rio de Janeiro, Brazil, with the Reform of Primary, Professional and Secondary Education. However, in the absence of municipal, state and/or Federal public policies, state legislation was not sufficient to guarantee universal assistance, and the practice consisted of isolated initiatives (Delou, 2007).

Unlike Portugal, it is noted that, in Brazil, the educational actions aimed at these students rely mainly on governmental initiatives (Fleith, Almeida, Alencar, & Miranda 2010), either through extension projects developed at universities, Activity Centers of High Abilities/ Giftedness (known as *Núcleos de Atividades de Altas Habilidades/Superdotação* - NAAH/S) or supplementary activities in Multifunctional Resource Rooms<sup>6</sup> (Fortes & Freitas, 2007; Gama, 2006; Koga & Chacon, 2017; Leonessa & Marquezine, 2016; Mendonça, Mencia, & Capellini, 2015). Differences regarding legislation are also observed between the two countries. In Brazil, there are Laws, Resolutions and guiding documents that ensure the right to specialized educational services for students with HA/GD; in Portugal, legislation is scarce. Although there are educational measures for those who demonstrate 'exceptional learning ability', this public is not targeted by the Special Education services, except in the Autonomous Region of Madeira, which has its own legislation (Fleith et al., 2010; Pocinho, 2009).

This theme has globally received greater visibility in recent years, however, in both countries, Portugal and Brazil, school reality is also characterized by a general lack of attention to the needs of students with above average skills and intellectual abilities. Part of this situation is related to the unfamiliarity of educators and teachers about this phenomenon. Carvalho (2016) argues that the difficulty of teachers to respond to the special educational needs of these students who deviate from the 'standard' is a consequence of the fragile education they receive in the field of HA/GD. For this reason, institutions of teacher education should include contents on this theme in the academic curricula of educators and teachers.

According to Bahiense and Rossetti (2014), teachers need to be properly educated to be able to identify students who have high abilities and also to be able to identify their needs in terms of educational attention. The major problem is the lack of scientific information on the subject, which generally favors the emergence and propagation of myths and misconceptions about it.

Studies have highlighted HA/GD as content that does not integrate with the academic education of educators and teachers in Brazil and Portugal. In 2003, Miranda and Almeida warned that the subject of giftedness did not integrate with the curricular components of teacher education courses and other education professionals in the Portuguese context, bringing negative consequences to the process of identifying students with abilities above average. The precariousness of the teacher education concerning the contents necessary to attend the needs of these students was also verified by Matos (2015) and Z. C. F. Pinto (2013). A study of the Education Information Network in Europe (Eurydice, 2008) analyzing the education policies of 30 European countries in relation to the actions to promote HA/GD, showed that Portugal is not among the countries that have this theme as compulsory in teacher education.

In a study conducted by Bahiense and Rossetti (2014), who interviewed 20 teachers from the Portuguese and Mathematics disciplines in the public network of Vitória/Espírito Santo-Brazil, 19 of these teachers reported not having seen anything about the inclusion of public target students of Special Education during the undergraduate course. At the same time, considering the continuing education, only six teachers reported having access to HA/

<sup>&</sup>lt;sup>6</sup> Space used by the Specialized Educational Service of targeted students of Special Education, at a different time to those that attend the common class.

GD content. This gap in teacher education has been widely recognized (Guimarães, 2004; Ramalho, Silveira, Barros, & Brum 2014; Reis, 2006; Procópio, 2010).

As we believe in the importance of teaching knowledge on the theme for the elaboration of educational practices adequate to the development of the students' potential, we analyze the curricula of the education of educators<sup>7</sup> and teachers who will work with children aged from three to 10.8 This analysis was carried out with the curriculum of two public universities, one Brazilian (*Universidade Estadual Paulista 'Júlio de Mesquita Filho' -* UNESP) and another Portuguese (*Universidade do Minho -* UMinho). The research aimed to verify and describe the presence of contents related to HA/GD in these Universities, as well as to verify their absence. The choice of these two Universities is due to the fact that in both there is investigation and scientific production in this field of study.

#### 2 Method

In Brazil, the education of teachers for teaching children aged 0 to 10 (Early Childhood Education and first grades of Elementary Education) is offered by the courses of Full Degree in Pedagogy (Resolução CNE/CP nº 1, 2006). From this perspective, we seek to analyze the equivalent education in the Portuguese university. Thus, preliminary to the beginning of the analysis of the formative curricula, it was necessary to understand the organization of the Portuguese education system; therefore, we consulted the Basic Education Law No. 46/1986, amended, republished and renumbered as Law No. 49/2005 (Lei nº 49, 2005), the legal regime of professional qualification for teaching (Decreto-Lei nº 79, 2014) and other complementary legal publications.

Regarding the universities investigated, UNESP, which is characterized as a multi campus university, is present in 24 cities in the state of São Paulo and offers the Pedagogy course in six campuses. While UMinho has two campuses in two cities that are located in the Northern region of Portugal, the teacher education for those who will work with children occurs exclusively on the campus of Gualtar, in the city of Braga. Given the disproportion in the dimensions of these universities, we delimited the analysis of the Brazilian university to the course offered in the campus of Marília, because in this unit there is a consolidated research and extension program responsible for the enrichment of students with gifted behavior and their respective family members<sup>9</sup>.

UMinho provides the syllabus of the courses on its webpage, which enabled us to verify the name, the timetable, the objectives, the learning results, the summary of the program and the essential bibliography of all the curricular units. We then asked the departments for the complete programs of the disciplines in which there was some mention of Special/Inclusive Education. In contrast, UNESP (Campus of Marília) discloses only the curricular matrix of the course, containing the name and the timetable of its subjects, along with the necessary

<sup>&</sup>lt;sup>7</sup> In Portugal, the professionals responsible for pre-school education of children are called Childhood Educators.

<sup>&</sup>lt;sup>8</sup> In Brazil, Early Childhood Education is the first stage of Basic Education and it is aimed at children from 0 to 5 years old. When they are 6 years old, Elementary School begins. In Portugal, Pre-School Education occurs from the age of 3 to 5 and Basic Education starts at the age of 6.

<sup>&</sup>lt;sup>9</sup> The coordinator of this program, Professor Miguel C. M. Chacon, PhD, also guides theses and dissertations on this subject. At UMinho, research on giftedness is developed/guided by Professor Leandro S. Almeida, PhD.

payment for access to each program. For this reason, we had to make a selection from the titles, requesting the complete programs from those that are destined to the studies related to Psychology and Special/Inclusive Education. With the complete programs, we verified the presence of HA/GD among the objectives and contents presented. In cases where we did not find any reference, we checked the basic bibliography to be certain about this absence.

### **3 RESULTS AND DISCUSSIONS**

According to Law No. 49/2005, the education system in Portugal is organized into: pre-school education, school education and extra-school education. In this study, we will consider the preschool and school modalities. Pre-school education is optional and is intended for children between the ages of 3 and 5 (Lei n° 5, 1997) and is universal from the age of four (Lei n° 65, 2015). School education is divided into: Basic Education, Secondary Education and Higher Education. Students enter Basic Education at the age 6.<sup>10</sup> It is compulsory, free and nine-years in duration, subdivided into three cycles. The first four years of schooling comprise the first cycle of Basic Education; the second cycle covers the fifth and sixth years of schooling, while the third cycle is formed for the subsequent three years. Secondary Education lasts for three years and is intended for students who complete Basic Education, while Higher Education involves university and polytechnic education (Lei n° 49, 2005).

Law No. 9,394/1996 establishes the guidelines and bases of Brazilian education and organizes Basic Education as: Early childhood Education (*Educação Infantil*), Elementary Education (*Ensino Fundamental*) and High School (*Ensino Médio*). Early Childhood Education is aimed at children from 0 to 5 years old. At the age of 6, children start Elementary school, which lasts nine years. High School is the last stage of Basic Education, which has a minimum duration of three years and may involve education for technical professions. Basic Education is compulsory for those in the age group of 4 to 17. Finally, Higher Education (*Ensino Superior*) is offered by Higher Education institutions, covering undergraduate, postgraduate and extension courses (Lei n° 9394, 1996).

Considering that, in Brazil, Pedagogical education enables teachers to work in Early Childhood Education (children from 0 to 5 years of age) and in the first five years of Elementary School (children from 6 to 10 years old), we analyzed the education of Portuguese teachers who work in Pre-school Education (children between 3 and 5 years of age) and in the first cycle of Basic Education (children from about 6 to 9 years old).

#### 3.1 EDUCATION OF TEACHERS IN PORTUGAL

Regarding the structure of teacher education, Portugal is a signatory to the Bologna Accord (Bianchetti & Magalhães, 2015); thus, initial education occurs in two cycles. Initially, the Undergraduate Teaching Degree course is held, which serves as a foundation for the professional in his/her area of teaching and happens over a period of three years. However, it should be noted that such a degree does not qualify for the teaching profession, as a professional Master's degree in Education with a duration of three to four semesters is necessary for this,

<sup>&</sup>lt;sup>10</sup> Children entering school are usually those who complete 6 years old until September 15, but those who were born after that date can enter school at the request of the person in charge of education and in case there is a place at the school.

depending on the area of expertise. This second cycle of education aims to complement and deepen the knowledge acquired in the previous cycle (Decreto-Lei no 79, 2014).

In order to work at the levels of education that interests us, the academic student must attend the Undergraduate Teaching Degree in Basic Education, followed by one of the five options of Master's: Pre-school Education; 1st Cycle of Basic Education; Preschool Education and Teaching the 1st Cycle of Basic Education; Teaching the 1st Cycle of Basic Education and Portuguese, History and Geography of Portugal in the 2nd Cycle of Basic Education; and Teaching the 1st Cycle of Basic Education and Mathematics and Natural Sciences in the 2nd Cycle of Basic Education. It should be noted that Basic Education in Portugal covers three cycles: the 1st Cycle includes the first 4 years; the 2nd Cycle encompasses the 5th and 6th years of schooling; and the 3rd Cycle integrates the 7th to the 9th year of schooling.

The curricular structure of the Master's degree, as well as the Undergraduate Teaching Degree, should include the following components: teaching area; general educational area; specific didactics; cultural, social and ethical area; and professional practice. In the case of the Undergraduate Teaching Degree, the predominance is in the teaching area, which concerns the advanced study of the contents and the disciplines necessary for the exercise of the career, that is, it refers to the knowledge of the subjects to be taught: Portuguese, Mathematics, Natural Sciences, History and Geography of Portugal and expressions (Decreto-Lei no 79, 2014).

Knowledge about curricular contents is highly valued, as it is believed that '[...] the depth of teachers' knowledge about the specific subjects they teach has a significant effect on their autonomy and safety in the classroom, which translates into a higher quality of student learning' (Decreto-Lei no 79, 2014, p. 2820).

The Undergraduate Teaching Degree in Basic Education requires the fulfillment of 180 credits. The distribution of the minimum number of credits that each component must have is shown in Table 1:

| Education component                 | Number of credits | %     |
|-------------------------------------|-------------------|-------|
| Teaching area                       | 125               | 69.44 |
| General Educational Area            | 15                | 8.33  |
| Specific Didactics                  | 15                | 8.33  |
| Initiation to professional practice | 15                | 8.33  |
| Total course credits                | 180               | 100   |

**Table 1.** Distribution of the minimum amount of credits of the education components for the Undergraduate Teaching Degree in Basic Education

Source: Elaborated by the authors based on Decree-Law No. 79/2014.

The 'General Educational Area' component comprises the knowledge necessary for all teachers, since it addresses aspects related to development, learning, curriculum, assessment, special educational needs, organization of the educational process, etc. The 'Specific Didactics' refers to teaching strategies and is a component closely related to the 'Teaching Area'. The 'cultural, social and ethical area' aims to raise awareness of issues of gender, ethnicity, diversity

of religion and thought, among others; awareness of the ethical and civic character of the profession; broaden students' knowledge beyond those required by teaching, involving scientific, artistic and humanity aspects. Finally, the 'Initiation to professional practice' corresponds to experiences learned inside or outside the classroom, but are linked to the practical aspects of the teaching activity.

|         | Table 2 shows | the distribution | of the | minimum | number | of credits | for each | Master's |
|---------|---------------|------------------|--------|---------|--------|------------|----------|----------|
| compone | nt:           |                  |        |         |        |            |          |          |

| Education component          |    | Pre-School 1st Cy<br>Education Teachi |    | •     | 1st Cycle and<br>Preschool |     | 1st Cycle and Portuguese, History and Geography in the 2nd Cycle |      | 1st Cycle and<br>Mathematics and<br>Natural Sciences<br>in the 2nd Cycle |      |
|------------------------------|----|---------------------------------------|----|-------|----------------------------|-----|--|------|--|------|
|                              | N  | %                                     | N  | %     | N                          | %   | N  | %    | N  | %    |
| Teaching area                | 6  | 6.67                                  | 18 | 20    | 18                         | 15  | 27   | 22.5 | 27   | 22.5 |
| General Educational<br>Area  | 6  | 6.67                                  | 6  | 6.67  | 6                          | 5   | 6  | 5    | 6  | 5    |
| Specific Didactics           | 24 | 26.67                                 | 21 | 23.33 | 36                         | 30  | 30   | 25   | 30   | 25   |
| Supervised teaching practice | 39 | 43.33                                 | 32 | 35.56 | 48                         | 40  | 48   | 40   | 48   | 40   |
| Total of credits             | 90 | 100                                   | 90 | 100   | 120                        | 100 | 120  | 100  | 120  | 100  |

**Table 2.** Distribution of the minimum amount of credits of the education components for the Undergraduate Teaching Degree in Basic Education

Source: Elaborated based on Decree-Law No. 79/2014.

It can be seen that in all specializations there is a predominance of 'Supervised teaching practice', which refers to the professional internship, resulting in a final report (Decreto-Lei no 79, 2014). Next, there is the 'Specific Didactics', proceeding from the 'Teaching Area', so that the 'General Educational Area' component presents the lowest incidence, with the exception of the Master's Degree in Pre-school Education in which there is equivalence in the number of credits in the last two components.

#### 3.2 TEACHER EDUCATION IN BRAZIL

In Brazil, we are interested in analyzing the education in the Pedagogy course. Created in 1939, this course was initially structured in the format known as '3 + 1': a three year-course for the Bachelor Degree and one more year (optional) for the acquisition of the Undergraduate Teaching Degree in order to teach pedagogical subjects. Its creation occurred to supply the demand for educational technicians. Over time, its structure and its purpose were modified and, in the 1980s, 'it began to gain the specificity of educating professionals for teaching' (Fonseca-Janes & Omote, 2013, p. 328).

In 2006, the National Curricular Guidelines for this course (Resolução CNE/CP nº 1, 2006) established the role of educating teachers to work with Early Childhood Education

and in the initial grades of Elementary Education. According to these guidelines, this education should incorporate the principles of: interdisciplinarity, contextualization, democracy, social relevance and ethical, affective and aesthetic aspects. Such a course should enable the knowledge necessary for citizenship education; research and use of results in the educational context; participation in the management of educational systems and institutions.

According to the National Curricular Guidelines for Initial and Continuing Higher Education of Teaching Professionals for Basic Education (Resolução CNE/CP n° 2, 2015), the initial education of teachers covers three areas: Core I consists of '[...] studies of general education of the specific and interdisciplinary areas and of the educational field, its foundations and methodologies, and the diverse educational realities (Resolução CNE/CP n° 2, 2015, p. 49); Core II is aimed at '[...] deepening and diversifying studies on the areas of professional work, including specific and pedagogical contents, prioritized by the pedagogical project of the institutions and in accordance with the education systems' (Resolução CNE/CP n° 2, 2015, p. 49); and Core III includes studies aimed at enriching the curriculum (seminars, extension projects, scientific initiation, exchanges, among others) (Resolução CNE/CP n° 2, 2015).

The total duration of the course must be at least 3,200 hours, divided as shown in Table 3:

| Educational component                   | Number of hours | %     |
|---|-----------------|-------|
| Practice as a curricular component      | 400             | 12.5  |
| Supervised internship                   | 400             | 12.5  |
| Educational activities of Core I and II | 2.200           | 68.75 |
| Educational activities of Core III      | 200             | 6.25  |
| Total course load                       | 3.200           | 100   |

**Table 3**. Distribution of the course load of initial teacher education courses in Brazil Fonte: Elaborated by the authors based on Resolution CNE/CP No. 2/2015 (Resolução CNE/CP n° 2, 2015).

Resolution CNE/CP No. 2 of July 1, 2015, establishes that educational institutions should provide in their curricula,

[...] specific contents of the respective area of knowledge or interdisciplinary, its foundations and methodologies, as well as contents related to the fundamentals of education, training in the area of public policies and management of education, its foundations and methodologies, human rights, ethnic-racial, gender, sexual, religious, generational diversity, Brazilian Sign Language (*Libras*), special education and educational rights of adolescents and young people in compliance with socio-educational measures (Resolução CNE/CP n° 2, 2015, p. 11).

However, there is no specific determination on the course load to be allocated to the different contents/curricular components, which seems to allow more autonomy to Brazilian universities in relation to Portuguese universities, although both have the right to educational, administrative and financial autonomy, constitutionally guaranteed (Constituição da República Federativa do Brasil, 1988; Constituição da República Portuguesa, 1976).

The lower pedagogical autonomy of the Portuguese university in relation to the Brazilian one converges with the results of the exploratory study that involved 28 countries which portrayed the autonomy of universities in Europe. According to this investigation, the autonomy of the university in Portugal was classified as medium-high in the organizational, financial and human resources dimensions, being considered medium-low in the academic dimension (Estermann & Nokkala, 2009). According to H. E. Pinto (2015), university autonomy is a fundamental principle in the Brazilian Higher Education model. It is not an end in itself or an unlimited right, but a means of guaranteeing the independence of knowledge and the freedom of teaching, research and innovation. In the full exercise of this autonomy, '[...] transparency, publicity, reasonableness, accountability, democratic management and broad submission to social control must be ensured' (H. E. Pinto, 2015, p. 23).

#### 3.3 CURRICULAR PROGRAMS

According to Decree-Law No. 42/2005, Portugal adopts the European Credit Transfer System (ECTS), so that the credits correspond to the '[...] unit of measurement of student work in all its forms, namely, collective teaching sessions, personal orientation sessions of the tutorial type, internships, projects, fieldwork, study and evaluation' (Decreto-Lei no 42, 2005, p. 1495). During the school year, the student must reach 60 credits, which are measured from an estimate of his/her working time. Given the predominant structure of Teaching undergraduate courses in Brazil, which is based on the number of hours in class, we will consider only the number of hours in guided theoretical-practical activities, disregarding the time spent on individual studies of an autonomous nature.

UMinho (Gualtar Campus) offers an Undergraduate Teaching Degree in Basic Education and four possibilities of Master's in Teaching: Pre-school Education; Pre-school Education and Teaching the 1st Cycle of Basic Education; Teaching the 1st Cycle of Basic Education and Portuguese and History and Geography of Portugal in the 2nd Cycle of Basic Education; Teaching the 1st Cycle of Basic Education and Mathematics and Natural Sciences in the 2nd Cycle of Basic Education.

Table 4 presents the compulsory subjects that carry out studies related to Special/Inclusive Education in both of the universities investigated.

| University                | Disciplines that make reference to Special /<br>Inclusive Education   | Educational stage   | Course load<br>(in hours)              |
|---------------------------|---|---|--|
| UNESP – Marília<br>Campus | Universal Design, Accessibility and Adaptations Diversity, Difference and Disability Fundamentals of Inclusive Education Sign Language Curriculum and Special Educational Needs | 1st year – 2nd semester<br>1st year – 2nd semester<br>2nd year – 1st semester<br>3rd year – 2nd semester<br>4th year – 1st semester   | 45<br>30<br>75<br>45<br>75             |
|                           | Psychology of Child Development and<br>Learning<br>Sociology of Childhood and Education   | Teaching Degree:<br>2nd year – 1st semester<br>2nd year – 2nd semester  | 60<br>45                               |
| UMinho – Braga<br>Campus  | Inclusion and Special Educational Needs<br>Advanced Topics in Pedagogy in Childhood<br>Education  | Master's: Pre-school education: 1st year - 1st semester Pre-school education and 1st Cycle of Basic Education: 2nd year - 1st semester Teaching the 1st Cycle of Basic Education and Portuguese and History and Geography of Portugal in the 2nd Cycle of Basic Education: 2nd year - 1st semester Teaching the 1st Cycle of Basic Education and Mathematics and Natural Sciences in the 2nd Cycle of Basic Education: 2nd year - 1st semester Pre-school education: 1st year - 1st semester Pre-school education and 1st Cycle of Basic Education: 1st year - 1st semester | 45<br>45<br>45<br>45<br>45<br>45<br>45 |

**Table 4.** State of the art of the disciplines that make reference to Special/Inclusive Education in its curricular programs in UNESP, Marília Campus (Pedagogy) and UMinho, Gualtar Campus (Undergraduate Teaching Degree in Basic Education and Master's in Teaching) Source: Elaborated by the authors.

UNESP Pedagogy course (Marília Campus) offers five compulsory disciplines focused on Special/Inclusive Education. Among them, *Curriculum and Special Educational Needs* is the component that has curricular space to deal with the characteristics and needs of the target public students of Special Education. This discipline occurs in the first semester of the fourth year of the course and represents 75 hours of course load, involving theory and practice which includes the programmatic contents: Inclusive Education and Special Educational Needs (SEN) - conceptual discussion and perspectives of educational practice; delimitation of the student's educational needs; curricular adaptations.

The curricular program of this discipline does not point out the SEN that will be addressed; however, it is understood that HA/GD are contemplated as a result of the references present in the basic bibliography that are included in this thematic, such as the 2003 publication of the Ministry of Education (MEC), Estratégias para a Educação de Alunos com Necessidades Educacionais Especiais — Strategies for the Education of Students with Special Educational Needs. The other disciplines focus on accessibility issues; social construction of the concepts of diversity and disability; history of Special Education; concepts, policies and fundamentals of Inclusive Education. It is emphasized that the Fundamentals of Inclusive Education discipline involves among its objectives the analysis of the main concepts related to Inclusive Education, including SEN. The programmatic content, however, does not mention the characterization of the target public students of Special Education.

At UMinho (Gualtar Campus), the Teaching undergraduate course in Basic Education has two disciplines that give scope for the understanding that Special/Inclusive Education is covered. Psychology of Child Development and Learning, taught in the first semester of the second year of the course, with 60 hours of theoretical-practical activities, shows in its programmatic content: Learning in normal situations and embarrassment provoked by SEN.

The discipline Sociology of Childhood and Education, developed in the second semester of the second year of education, with a duration of 45 theoretical-practical hours, includes among its contents: teaching work as a form of professional action with children from an Inclusive Education perspective, multicultural and promoting active citizenship. However, both disciplines do not have the theme of Special/Inclusive Education among their objectives and do not provide more information about such study, nor do they have specific references on the subject, which does not allow us to infer that content related to giftedness is approached.

In the Master's in Education, all the courses analyzed offer the curricular unit Inclusion and Special Educational Needs, with a 45-hour workload of theoretical and practical studies, available in the first semester of the first year of the Master's Degree in Pre-School Education and in the first semester of the second year in the others. Being a specific discipline in the area of Special/Inclusive Education, we highlight the contents: Assistance to children with SEN and their families; concepts of SEN; educational risk; giftedness; early intervention; the child with SEN and the society; life after school. It can be observed that giftedness content is explicitly included in the curricular programming of this discipline.

The Master's in Pre-School Education and in Pre-School Education and Teaching the 1st Cycle of Basic Education also have the curricular unit Advanced Themes of Pedagogy in Childhood Education, with 45 hours of theoretical-practical classes in the first semester of the early years of the courses. Its programmatic content includes: diversity and difference in Early Childhood Education. However, similarly to the disciplines analyzed in the Undergraduate Teaching Degree course in Basic Education, this curricular unit does not have Special/Inclusive Education among its objectives or basic bibliography, in a way that does not seem to be a field destined to the study of giftedness.

As we have already pointed out, the absence of content about this phenomenon in teacher education damages the education of students with high potentialities. Lack of knowledge generates myth-based conceptions that cause many educators to believe that the

student with HA/GD must be highly proficient in all subjects and fit into a stereotyped pattern (Ramalho et al., 2014). Due to unfamiliarity and misconceptions, students with high abilities are no longer identified and adequately stimulated.

Based on the analysis of the curricular programs of the courses for the childhood education teachers, it is inferred that both the Pedagogy course of UNESP (Marília Campus) and UMinho Master's in Teaching (Gualtar Campus) promote the study of HA/GD. In the case of UNESP (Marília Campus), the approach of this subject is given in the scope of the discipline Curriculum and Special Educational Needs (75 hours) and in UMinho (Gualtar Campus) the approach occurs in Inclusion and Special Educational Needs (45 hours). In addition to the discipline referred to in UNESP (Marília Campus) there is a greater number of classes than the current course in UMinho (Gualtar Campus de). UNESP (Marília Campus) has four more specific compulsory subjects on Special/Inclusive Education in its curriculum, pointing to a denser formation in this aspect. Also, the last semester of the course is aimed at deepening the area of choice for the academic, which can be: Early Childhood Education; Special Education or School Management. If the student chooses to deepen in Special Education, he/she will study five other subjects on the subject. There are 270 hours of theoretical-practical classes that are compulsory for all academics and 300 hours for those who choose to undertake further studies in Special Education (Fonseca-Janes & Omote, 2013).

However, it is pointed out that this is not a reality in all courses of Pedagogy at UNESP. In a study of the subjects that comprise the courses of Pedagogy at that university, Martins and Chacon (2017) found that with the exception of the Marília Campus, the other five courses of Pedagogy offer at least one and at most two disciplines regarding Special/Inclusive Education. It was verified through the analysis of the teaching plans of these disciplines that the HA/GD thematic was not present among the contents of three courses. This is also the reality of other Brazilian universities.

UNESP (Marília Campus) distinguishes itself by having a strong tradition in the area of Special Education, being the pioneer state public institution in the education of specialist teachers in this field since 1977 when it began to offer the qualification in Special Education. With the publication of the National Curricular Guidelines for Pedagogy courses in 2006 the qualifications were extinguished and the course underwent a restructuring, maintaining the concern to offer a solid education in the area. This was especially due to the influences of the professors of the Department of Special Education in this process (Fonseca-Janes, Silva Junior, & Oliveira, 2013). It should also be noted that it is the only campus of the University to have a Department of Special Education and a line of research in Special Education to integrate its program of Postgraduate studies in Education (Fonseca-Janes & Omote, 2013).

Another point to be highlighted is that the legal regime of professional qualification for teaching in Portugal, approved by Decree-Law No. 79, of May 14, 2014, establishes a minimum of 15 credits for the component 'General Educational Area' in the Undergraduate Teaching Degree in Basic Education and a minimum of 6 credits in the Master's analyzed, representing 8.33% and between 5 and 7% of the degrees, respectively. This means that there is limited space to deal with relevant aspects such as developmental Psychology, learning

processes, curriculum, educational organization, school inclusion and others (Decreto-Lei no 79, 2014), and as such imposes difficulty in extending studies on Special/Inclusive Education.

It should be emphasized that the presence of HA/GD in the disciplines of teacher education is contemplated in both universities. Curriculum content is of great relevance, since without knowledge about SEN, educators do not have the necessary conditions to 'notice, indicate and deal with these students' (Barreto & Mettrau, 2011). Besides, it is necessary for the teacher to understand that a child with superior abilities is similar to others in several aspects, with higher intellectual capacity being his/her main difference, which also calls for his/her own needs (Pocinho, 2009).

To Almeida, Araújo, Sainz-Gómez, & Prieto (2016), the fact that this theme is not sufficiently studied during the initial and continuous education of teachers, among other professionals, results in the lack of preparation of those responsible for identifying these children and teaching them. In fact, the authors consider that this unpreparedness may be one of the reasons for identifying more boys than girls. According to Hoffmann (2014, p. 36), '[...] it is not enough to offer schools for all, it is essential that the 'all' do not lose the dimension of individuality', that is to say, the school must provide the necessary conditions for each student to achieve the maximum possible development in terms of learning and citizenship, a task that. in our view, is closely related to teacher education.

# **4** Final considerations

Researches have verified the deficient knowledge of Portuguese and Brazilian educators regarding students with HA/GD (Bahiense & Rossetti, 2014; Barreto & Mettrau, 2011; Eurydice, 2008; Guimarães, 2004; Matos, 2015; Miranda & Almeida, 2003; Z. C. F. Pinto, 2013; Procópio, 2010; Ramalho et al., 2014; Reis, 2006), and interferes with the recognition and satisfaction of the students' school needs. This situation highlights the importance of conducting studies on HA/GD in teacher education courses, highlighting the contents taught and pointing out their insufficiencies.

With the objective of analyzing the presence of contents on HA/GD in the curricula of teacher education of those who will work with children in the initial years of schooling, we raised the issue of curricular programs of the subjects of the Pedagogy course at UNESP (Marília Campus) and the Undergraduate Teaching course in Basic Education at UMinho (Gualtar Campus), along with the Master's in Teaching. It was possible to verify that the education of teachers in the courses investigated brings along the HA/GD thematic in the curricular contents of their disciplines.

At UNESP (Marília Campus), the discipline Curriculum and Special Educational Needs, with 75 hours of theoretical-practical classes, does not state what SEN are addressed. As HA/GD are among the components present in the bibliographic references used, it is inferred that the subject is approached. The Pedagogy course offers four other compulsory disciplines on Special/Inclusive Education and a core of further study in Special Education (optional). With a broad range of course hours available to the Special Education area from the perspective of Inclusive Education, it is assumed that there are no major difficulties in the development of HA/GD studies.

At UMinho (Gualtar Campus), the curricular unit Inclusion and Special Educational Needs, with 45 hours of theoretical and practical activities, clearly mentions the giftedness among its programmatic contents. Since this is the only discipline specifically dedicated to Special/Inclusive Education, it is evident that the time spent on the study of giftedness is not enough to promote the desired depth of knowledge. The acquisition of the necessary knowledge to identify and offer educational attention according to the particularities of students with high potentialities requires theoretical foundation, confrontation of evaluation and assistive models, as well as characterization.

The possibilities of the Institution of Higher Education in providing the necessary knowledge about this subject in depth, cross the issue of the university pedagogical autonomy, and also, the sensitivity of the academics to the subject. This sensitivity is not always enough, and the perception remains that, without adequate education, teachers will continue to be deficient in the identification and different educational attention needs of these students, putting into question the implementation of the 'inclusive school'.

Finally, the results of this investigation are not subject to generalizations to other Portuguese or Brazilian universities. Two particular realities were extracted for this case study, but they give evidence of the commitment to the education of professionals who should promote educational actions aimed at the maximum development of each student, including those with HA/GD. Moreover, this study also presents a limitation in the fact that it was based exclusively on documentary analysis (curricular programs). For a more comprehensive analysis, it is intended that research continue involving the data collection of students who attend those disciplines, as well as interviews with Special Education teachers involved with HA/GD.

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