## Teaching in technical education in Brazil and Portugal<sup>1</sup>

# Docência e ensino profissional no Brasil e em Portugal

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#### ABSTRACT

This paper presents a comparative study on the organization of professional secondary education in Brazil and Portugal. The objective was to understand how professional courses are organized and structured in the scope of formal education, as well as to describe the requirements of access to teaching, specifically in the vocational curricular components. This qualitative research, whose corpus consisted of legislations, as well as publications from database research on teacher education for professional education in Brazil and Portugal. As a result, it can be affirmed that teacher training for Vocational Education is not instituted in the practice of institutions in either country, with legal support in Portugal and a decline in the valorization of pedagogical in Brazil.

Keywords: Technical Education. Teaching Training. Brazil. Portugal.

#### RESUMO

Este trabalho apresenta estudo comparado sobre a organização da educação profissional de nível médio no Brasil e em Portugal. O objetivo foi o de compreender como se organizam e se estruturam os cursos profissionais no âmbito da educação formal, bem como descrever os requisitos de acesso à

<sup>1</sup> Research project funded by the Post-Doctoral Program of CAPES – Public Notice no. 15/2016 process no. 88881.120341/2016-01. Translated by Nova Geração Serviços Editoriais, Brazil. Email: novageracaoservicoseditoriais@gmail.com.

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docência, especificamente nas componentes curriculares profissionalizantes. Trata-se de uma pesquisa qualitativa, cujo córpus constituiu-se de legislações, bem como de publicações oriundas de pesquisa em bases de dados com o tema formação de professores para educação profissional no Brasil e em Portugal. Como resultados, pode-se afirmar que a formação de professores para a Educação Profissional não está instituída na prática das instituições em nenhum dos dois países, tendo amparo legal em Portugal e um recuo na valorização do pedagógico no Brasil.

Palavras-chave: Ensino Técnico. Formação de Professores. Brasil. Portugal.

#### Introduction

The current world, the world of education, forces us to cultivate skepticism with one hand and utopia with the other. The skepticism that comes from the awareness of knowing that education is always one of the social spaces that produce inequality and discrimination concerning others: the other-poor, the other-black, the other-woman, the other-foreigner. You have to be aware. The utopia that comes from the awareness of knowing that everything is still possible, that there is a science to reinvent and that this science will not be aseptic, indifferent, blind to life.

António Nóvoa (our translation)

Recently, Brazil changed its Law of Guidelines and Bases for National Education (LDBEN), so that high school could be modified. These changes were justified based on statistics and studies: The National Household Sample Survey (in Portuguese "Pesquisa Nacional por Amostra de Domicílios' (PNAD)) indicates that enrollment in secondary education dropped from 8,7 million to 8,3 million in the last decade (2002-2012), which just over 50% of young people between 15 and 18 years old attend High School. And a study carried out by the Brazilian Center for Analysis and Planning (CEBRAP), with support from the Víctor Civita Foundation, concluded that there is a lack of interest among young people in taking elementary education (TORRES, 2013), despite the economic and social concerns that may be involved in such a study, sponsored by Itaú Bank and Telefônica Vivo Foundation.

The discourse for improving the quality of education has been at the center of the debate. The numbers, statistics, and research of various orders and nature

invade the media and provoke discussions on the subject. Teaching models from other countries are used to justify changes made. We live in a globalized world, in which the policies of one country end up influencing the direction of the politics of other countries, especially following the colonialist logic in which the south import models from the north.

Thus, this article presents a comparative study between Brazil and Portugal in this implantation moment for a change in the High School, which modifies Professional Education by extension. Based on the questions of how the stage corresponding to the secondary level in Brazil and Portugal organizes the professional education and what are the requirements to exercise teaching in the technical subjects of this teaching stage. The study aimed to understand the organization and structuration of professional courses within the scope of formal education, as well as describe the requirements for access to teaching, specifically in the professionalizing curriculum components.

First, we will present the study methodology. Next, we will present the organization of Secondary Education in Portugal and Brazil, with a focus on Technical Education. Soon after, we will dedicate ourselves to the issue of legal requirements for access to the teaching career in this type of education. We will end with some conclusions about the theme.

### Methodology

The study presented here is within the scope of qualitative research in education and thus seeks to understand the phenomena in their contexts (BÓGDAN; BIKLEN, 1994). The question that mobilized this investigation was: "How is vocational education organized at the secondary level in Brazil and Portugal, and what are the requirements for teaching in the technical subjects of this teaching stage?" We use document analysis as a method. The body of investigation included the Basic Laws of the Educational System of Portugal and the Law of Guidelines and Bases of National Education in Brazil, as well as articles, books, and notebooks found in databases such as Scielo, in the library of the University of Lisbon and, also, through Google, with the descriptor "Educação Profissional Brasil Portugal". We separated, read, and analyzed the studies that were related to the proposed question. The objectives were: to describe how technical education is situated in both countries, to compare this education to secondary education, and to understand its structure. Also, highlight the legal requirements for access to teaching, specifically about the technical disciplines at this level of education.

It is, therefore, a comparative study, assuming the perspective that: "Comparative research interprets and constructs facts, not just discovering or describing them" (NÓVOA, 2010, p. 52, our translation).

Despite the criticism that comparative studies involving North-South may receive, this study seeks to compare the structuring of teaching in Vocational Education in both countries, since the discourses that hold Brazilian reforms express inspiration in the perspective of importing "models" from the North to the southern hemisphere of the world. The scarcity of academic papers in the search shows that the topic is still unexplored, which announces the possible potential of the investigation. Above all, the High School Reform, implemented by Law nº 13.415 of 2017 february (BRASIL, 2017a), seems to have a great inspiration in the Education System of other countries, which we will evidence in the next section.

## Organization of high school in Brazil and Portugal

Within the scope of the Portuguese educational system, school education comprises elementary, secondary, and higher education, integrates special modalities, and includes leisure activities, according to the Basic Law of the Educational System (LBSE) in its Art.4 (PORTUGAL, 2005). Elementary education consists of 3 cycles, for a total of 9 years of schooling. Secondary education is organized into courses predominantly oriented towards active life and the continuation of studies, for a total of 3 years.

## FIGURE 1 – PORTUGUESE EDUCATIONAL SYSTEM



SOURCE: Educação em números (PORTUGAL, 2008).

The objectives of secondary education, according to Article 9 of the LBSE:

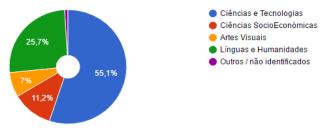
a) To ensure the development of reasoning, reflection, and scientific curiosity and the deepening of the fundamental elements of a humanistic, artistic, scientific, and technical culture that constitute appropriate cognitive and methodological support for the possible pursuit of studies and inclusion in the active life; [...]

e) Provide contacts and experiences with the world of work, strengthening the mechanisms of approximation between the school, the active life and the community and boosting the innovative and intervening function of the school;

f) To encourage the orientation and professional training of young people, through technical and technological preparation, to enter the world of work; [...] (PORTUGAL, 2005, our translation).

The secondary courses oriented to the pursuit of studies are called Scientific-Humanistic Courses and are subdivided into Science and Technology Course, Socioeconomic Science Course, Language and Humanities Course, and Visual Arts Course. They have general training components: Portuguese, Foreign Language, Philosophy, and Physical Education, common to all, and specific training components, belonging to the course chosen by the student. The graph below shows the distribution of students according to their choices, totaling 204.105 enrolled in 2015.

#### FIGURE 2 – DISTRIBUTION OF STUDENTS



SOURCE: Estátisticas do Ensino Secundário (PORTUGAL, 2015).

It is within the scope of secondary education geared to an active life that Professional Courses and Technological Courses appear, aimed at students who have completed nine years of elementary schooling and are looking for education more focused on the world of work without, however, leaving aside the possibility of continuing their studies. The Technological Courses are developed in the scope of the secondary schools while the Professional Courses take place in secondary schools and, also, in specific schools created by community demands, of organizations or other systems that seek to supply a determined training need and maintains its financing.

Technological Courses and Professional Courses are those offered by Secondary Schools, since they are in close coexistence with secondary education and, thus, the comparison of research will take place between these courses and the so-called Integrated Courses, in Brazil, which integrate high school and professional education.

Below we present the curriculum for Professional Courses:

TRAINING COMPONENTS	SUBJECTS	TOTAL AMOUNT OF HOURS
	Portuguese	320 h
Sociocultural	Foreign language	220 h
	Information and Communication Technologies	100 h
	PE	140 h
Scientific	2 to 3 subjects	500 h
Technician	3 to 4 subjects	1180 h
	Work-related training	420 h
The total amount of hours/Course		3100 h

FIGURE 3 – CURRICULUM FOR PROFESSIONAL COURSES

SOURCE: Agência Nacional para a Qualificação e Ensino Profissional (PORTUGAL, 2017).

These courses are regulated by the National Agency for Qualification and Professional Education (ANQEP),<sup>2</sup> and are grouped into families, listed below, to which the various technical courses are related:

2 The National Agency for Qualification and Vocational Education, I.P. (ANQEP, IP) is a public institute integrated with the indirect administration of the State, with administrative, financial and pedagogical autonomy in carrying out its duties, under the joint supervision of the Ministries of Education, and of Labor, Solidarity, and Social Security, in coordination with the Ministry of Economy.

– TABLE WITH FAMILIES OF PROFESSIONAL COURSES
Performing arts
Audiovisuals and media production
Design
Crafts
Philosophy, history, and related sciences
Journalism
Librarianship, archive, and documentation (BAD)
Trade
Marketing and advertising
Finance, banking, and insurance
Accounting and taxation
Management and administration
Secretariat and administrative work
Organization/company framework
Computer science
Metallurgy and metalworking
Electricity and energy
Electronics and automation
Chemical engineering
Motor vehicle construction and repair
Food industries
Textiles, clothing, footwear, and leather
Materials (wood, paper, plastic, glass, and others)
Extractive industries
Architecture and urbanism
Construction
Agricultural and animal production
Floriculture and gardening
Forestry and hunting
Fisheries
Health services
Dental Sciences
Support services for children and youth
Social work and guidance
Hotels and restaurants
Tourism and leisure
Environmental protection
Protection of people and property
Safety and hygiene at the work

## FIGURE 4 – TABLE WITH FAMILIES OF PROFESSIONAL COURSES

SOURCE: Agência Nacional para a Qualificação e Ensino Profissional (PORTUGAL, 2017).

Circular no. 1/ANQEP/2017 (PORTUGAL, 2017). shows the importance attached to Vocational Education in Portugal. It states the purpose that, by 2020, 50% of students attending secondary education will take dual certification courses, secondary and professional. In 2018, around 115 thousand students study at Professional and Technological Courses, which represents 29% of the total in this level of education (PORTUGAL, 2018).

Within the scope of the Brazilian educational system, school education encompasses basic education, formed by early childhood education, elementary education and high school, and higher education, composed of undergraduate and graduate courses. Early childhood education is offered in day-care centers up to 3 years old and kindergartens, from 4 to 5 years old. The elementary school has a total of 9 years of schooling, and high school has a minimum duration of 3 years. This last stage of the so-called basic education has undergone recent and controversial modifications. Such measures are being implemented and leave several uncertainties about the high school curriculum in Brazil, by referring to what they call the National Common Curricular Base, which established more doubts than possible paths, as it promoted disciplinary emptying (BRASIL, 2018).

Basic Education			Higher education			
Early	Childhood	Elementary	High School	Undergraduate	Graduate	
0 to 3 years	4 and 5 years	6 to 14 years	15 to 18 years	19 to 23 years	24 and 25 years	26 to 30 years
Day-care	Nursery and Kindergarten	1° to 9° grade	1° to 3°/4° year	1° to 4°/5° year	Masters	Doctorate
	Kindergarten	grade	year			

Youth and Adult Education From 15 years

SOURCE: the authors.

High school may have the following training paths: Languages and their technologies, Mathematics and their technologies, Natural sciences and their technologies, Human and social applied sciences, and Technical and professional training. At this moment, it is difficult to visualize the curriculum of the new high school since the Common National Base for the High School Stage (BNCC-EM), made available through Resolution CNE/CP n° 4 (December 17, 2018), establishes competencies where the mastery of disciplinary areas seems uncertain. It is possible to know that Portuguese and Mathematics will be present in the three years of formation, that the English Language will be mandatory, as well as practices of Physical Education, Art, Sociology, and Philosophy. It is also possible to know that the BNCC establishes a maximum of 1800 hours and that the remaining hours must correspond to the specialization of the chosen training path (BRASIL, 1996; 2018).

Professional Technical Courses in High School may take place in conjunction with high school and could be integrated or concomitant, or subsequently, when the student has already completed this teaching stage. Concurrently education takes place in two daily periods. The student has an enrollment referring to high school and another relating to technical education, which can be in the same school or different schools. The Integrated High School seeks the integration of scientific-humanistic-artistic and technical knowledge in its matrix, enabling the student to enter the world of work and to continue his studies.

Currently, Brazil has 8.1 million high school students, 1.9 million of whom are in professional education. It corresponds to 23,5% of students, and, of this total, around 500 thousand students attend Integrated High School (BRASIL, 2017b).

In the European Union, the completion rate of young people in high school was in the order of 79%. In Brazil, this rate was in the order of 37% in the year 2013. Integrated High School seemed to be a bet for overcoming the disinterest of young people in this stage of education (PEREIRA; TEIXEIRA, 2014). However, the scenario changed with the recent change in political directions in Brazil, and the bet to remediate this seems to be the flexibility of the curricula in different formative paths, being implemented. Even so, the Integrated High School continues to exist, being the main bet of the public network of Professional and Technological Education to overcome the supposed lack of interest of young people.

The courses are grouped into areas, listed in the National Course Catalog, as shown below:

Environment and Health
Control and Industrial Processes
Educational and Social Development
Management and Business
Information and communication
Infrastructure
Military
Food production
Cultural Production and Design
Industrial production
Natural resources
Safety
Tourism, Hospitality, and Leisure

#### FIGURE 6 - NATIONAL COURSE CATALOG

SOURCE: Catálogo Nacional de Cursos Técnicos - Ministério da Educação (BRASIL, 2016).

We can see that the idea of choosing different backgrounds in secondary education is present in both countries. However, in percentage, Portugal has a higher number of enrolled in Professional Courses with the perspective that these enrollments reach 50% of the total matriculated. Brazil had been making a vigorous investment in Professional Education. However, with the change in the direction of the government and political instability, it is difficult to predict what the orientation of secondary education will be.

Next, we will make a brief description of the requirements for entering the teaching profession in the professional curriculum components of Professional Education.

#### Teaching training: requirements in debate

The first issue that we need to address here is the identity of the professional education teacher. There are several areas in which there is no longer this doubt: the professor of mathematics is a mathematics graduate,<sup>3</sup> the professor

<sup>3</sup> In Portuguese, "Licenciado" (licensed), which designates the person who has completed a degree that qualifies for teaching, as assigned in Brazil. In Portugal, the term designates one who has completed a higher education course.

of geography is a graduate in geography. But who is the teacher responsible for teaching electronics, mechanics, construction, law, or administration in a technical course?

Professional Education, as part of high school or elementary education, is subject to its rules. In Portugal, the Basic Law of the Educational System announces that:

1 - Early childhood educators and teachers of basic and secondary education acquire professional qualification through higher education courses organized according to the needs of professional performance at the respective level of education and teaching. [...]

6 - The professional qualification of teachers of disciplines of a professional, vocational or artistic nature of basic or secondary education can be acquired through undergraduate courses that ensure training in the area of the respective discipline, complemented by appropriate pedagogical training.

7 - The professional qualification of secondary school teachers can also be acquired through undergraduate courses that ensure scientific training in the respective teaching area, complemented by appropriate pedagogical training (Article 34) (PORTUGAL, 2005, our translation).

The scenario of teacher training requirements has two distinct moments, before and post the Bologna Process:

About the Portuguese situation, since the publication of the first Basic Law of the Educational System (Law No. 46/86, of October 14), at least two moments can be identified regarding the changes in the training policies of teachers: a first, at the end of the nineties, in which a policy of awarding a degree was implemented to all educators/teachers, regardless of the level of education in which they exercised their profession; a second moment, associated with the adequacy to the Bologna Process (2006) resulting from the signing of the Bologna Declaration (1999) and which had the effect that the training of teachers of the 2nd and 3rd cycles of basic education and teachers of secondary education occurred only during the 2nd cycle of higher education training (MOURAZ; LEITE; FERNANDES, 2012, p. 190, our translation).

Thus, "the recently enacted legislation requires that the professional training of teachers, at all levels of non-higher education, be obtained with postgraduate, master courses, thus raising the level of qualification of teachers" (PINTASSILGO; MOGARRO; HENRIQUES, 2010, p. 35, our translation).

The areas of knowledge were grouped for recruitment and, by decree, the government establishes which are the master's specialties that must be taken and the minimum training criteria in the teaching area. Unlike Brazil, it is not necessary to have a certain degree to teach a specified discipline, but to have attended the credit load of the specific area in whatever the higher education course is and which allows the admission to the Master in Specific Education.

Below, we present a table that lists the Masters, credits, and recruitment groups for the areas that comprise secondary education:

Master's degree specialty	Minimum requirements for entry into the cycle of studies leading to a master's degree	Recruitment groups		
Teaching Portuguese in the 3rd Cycle of Basic Education and Secondary Education.	120 credits in Portuguese.	300	Portuguese	
Teaching Portuguese in the 3rd	<ul> <li>80 to 100 credits in Portuguese.</li> <li>40 to 60 credits in Latin and Classical Studies.</li> <li>80 to 100 credits in Portuguese.</li> <li>60 to 80 credits in German.</li> </ul>	300	Portuguese	
Cycle of Basic Education and Secondary Education and Latin in Secondary Education. Teaching Portuguese and German in the 3rd Cycle of Basic Education and Secondary Education.		310	Latin and Greek	
Teaching Portuguese and Spanish		300	Portuguese	
in the 3rd Cycle of Basic Education and Secondary Education. Teaching Portuguese and French in the 3rd Cycle of Basic Education and Secondary Education.	<ul><li>80 to 100 credits in Portuguese.</li><li>60 to 80 credits in Spanish.</li><li>80 to 100 credits in Portuguese.</li><li>60 to 80 credits in French.</li></ul>	340	German	
Teaching Portuguese and English	80 to 100 credits in Portuguese. 60 to 80 credits in English. 120 credits in English.	300	Portuguese	
in the 3rd Cycle of Basic Education and Secondary Education Teaching English in the 3rd cycle of Basic Education and Secondary Education.		350	Spanish	

FIGURE 7-TRAINING REQUIREMENTS FOR SECONDARY SCHOOL TEACHERS

(continue)

Teaching English and German in		300	Portuguese
the 3rd Cycle of Basic Education and Secondary Education. Teaching English and Spanish in the 3rd Cycle of Basic Education and Secondary Education.	<ul><li>80 to 100 credits in English.</li><li>60 to 80 credits in German.</li><li>80 to 100 credits in English.</li><li>60 to 80 credits in Spanish</li></ul>	320	French
Teaching English and French in		300	Portuguese
the 3rd Cycle of Basic Education and Secondary Education. Teaching Philosophy in Secondary Education.	80 to 100 credits in English. 60 to 80 credits in French. 120 credits in Philosophy.	330	English
Teaching History in the 3rd Cycle of Basic Education and Secondary Education.	c Education and Secondary 120 credits in History.		English
Teaching Geography in the 3rd	120 credits in Geography.	330	English
Cycle of Basic Education and Secondary Education. Teaching of Economics and Accounting.	120 credits in Geography. 120 credits in the set of two subject areas and none with less than 50 credits.	340	German
Teaching of Mathematics in the	120 credits in mathematics. 120 credits in the set of two subject areas and none with less than 50 credits.	330	English
3rd Cycle of Basic Education and Secondary Education. Teaching Physics and Chemistry in the 3rd Cycle of Basic Education and Secondary Education.		350	Spanish
Teaching Biology and Geology in	120 credits in the set of two	330	English
the 3rd Cycle of Basic Education and Secondary Education. Teaching of Energy, Electronics, and Automation.	subject areas and none with less than 50 credits. 150 credits in all three subject areas and none with less than 40 credits.	320	French
Computer education.	120 credits in Informatics.	410	Philosophy
Teaching of Agricultural Sciences.	120 credits in Agricultural Sciences	400	Story
Teaching of Visual Arts in the 3rd Cycle of Basic Education and Secondary Education.	120 credits in Visual Arts.	420	Geography
Physical Education Teaching in Basic and Secondary Education	120 credits in Physical Education and Sport	430	Economics and Accounting
Teaching Portuguese in the 3rd Cycle of Basic Education and Secondary Education.	120 credits in Portuguese.	500	Mathematics

(continue)

(conclusion)			
Teaching Portuguese in the 3rd Cycle of Basic Education and Secondary Education and Latin in Secondary Education.	80 to 100 credits in Portuguese. 40 to 60 credits in Latin and Classical Studies.		Physics and chemistry
Teaching Portuguese and German in the 3rd Cycle of Basic Education and Secondary Education.	80 to 100 credits in Portuguese. 60 to 80 credits in German.	520	Biology and Geology
Teaching Portuguese and Spanish in the 3rd Cycle of Basic Education and Secondary Education.	80 to 100 credits in Portuguese. 60 to 80 credits in Spanish.	540	Electrotechnics
Teaching Portuguese and French in the 3rd Cycle of Basic Education and Secondary Education.	80 to 100 credits in Portuguese. 60 to 80 credits in French.	550	Computing
Teaching Portuguese and English in the 3rd Cycle of Basic Education and Secondary Education	80 to 100 credits in Portuguese. 60 to 80 credits in English.	560 5	
Teaching English in the 3rd cycle of Basic Education and Secondary Education.	120 credits in English.	600	Visual arts
Teaching English and German in	80 to 100 credits in English. 60 to 80 credits in German.	260	PE
the 3rd Cycle of Basic Education and Secondary Education.		620	PE

SOURCE: Decreto-Lei n.º 79/2014 de 14 de maio de 2014 e Declaração de Retificação n.º 32/2014 de 27 de junho de 2014 (PORTUGAL, 2014a, 2014b).

This table raises several doubts: would the disciplines not listed in it, for example, mechanics, tourism, or those related to health, fall within the areas created? How are master's degrees organized to train teachers of specific technical content?

Based on this information, we sought to investigate the offer of the Master's Degrees in Teaching at Portuguese universities.<sup>4</sup> Among all the master's degrees offered, we find a single Master's degree in Economics and Accounting Teaching, offered by the University of Lisbon. The masters in Teaching of Agricultural Sciences and Teaching of Energy, Electronics, and Automation were not found in the information provided by universities, which makes us think about what would be the requirement to enter the teaching career if there is no offer of the courses they would qualify for?

<sup>4</sup> The University of Lisbon, New Universidade of Lisbon, Polytechnic Institute of Lisbon, University of Minho, University of Coimbra, University of Aveiro, and University of Porto.

In Brazil, the LDB, since 1996, predicted that every teacher, to work in basic education, should have pedagogical training that would enable him/ her. Thus, professional education integrated with high school as a stage of basic education should have trained teachers. However, public tenders rarely practiced such a request, since there was no regular offer of pedagogical training courses for that purpose, and the legislation provided a deadline for it to become mandatory. It caused the number of teachers without qualifications to expand over the years, and the solution seemed distant. At the end of 2016, there was a reform in the legislation, allowing, for professional education, the teacher could have notorious knowledge instead of the training previously provided (BRASIL, 2017a).

It is not possible to specify what the legislation intends or intended with such openness. But it is evident that by making the admission requirements of these teachers flexible for teaching, the mandatory pedagogical training for the various professionals trained in their specific areas has become fragile and, perhaps, difficult to be sustained by institutions that previously were no longer practicing this request in their teaching recruitment contests.

The professionalization of the teacher who works in professional education is a field in dispute. In 2015, the National Curriculum Guidelines for the initial training of higher education teachers were published (BRASIL, 2015), bearing the marks of their history:

Art. 14. Pedagogical training courses for non-licensed graduates of an emergency and provisional nature offered to holders of higher education diplomas trained in courses related to the intended qualification with a solid knowledge base in the area studied, must have a minimum variable workload of 1,000 (thousand) to 1,400 (one thousand and four hundred) hours of adequate academic work, depending on the equivalence between the original course and the intended pedagogical training (BRASIL, 2015, our translation).

In other words, although it presents progress for the first time, regulating the training of teachers to work in Professional and Technological Education, establishing pedagogical training for non-licensed graduates as the itinerary intended for this, the "emergency and provisional character" remains at its core, pointing out that in the legal view, it remains without a solution considered adequate. This "emergency and provisional character" has been following the field of teaching education for EPT and guided the various researches in progress that point out the need for an Agenda, in which "the struggle for the positioning of the Ministry of Education on the mandatory degree for teaching at EPT" be an essential guideline as well as "the effective commitment of the EP institutions to the continued training of their teachers" (OLIVEIRA, 2013, p. 99, our translation).

Not even this resolution had been implemented across the country, in 2019 the government approved the new National Curriculum Guidelines for Initial Teacher Training for Basic Education and Common National Base for Initial Teacher Training for Basic Education (BNC-Training) through Resolution 22 of the National Education Council (BRASIL, 2019). In the new legislation, although the emergency and provisional words have disappeared, there is a decrease in hours dedicated to theoretical studies, demonstrating a concept of training with the hegemony of practice, since 53% of the curricular workload is concentrated in this group (GROUP II), as can be seen below:

4.4.4 Pedagogical Training

In the case of unlicensed graduates, the qualification for teaching will take place in the course for Pedagogical Training, which must be carried out with a basic workload of 760 (seven hundred and sixty) hours, in the form and the following distribution:

- Group I: 360 (three hundred and sixty) hours for the development of professional skills integrated with the three dimensions contained in the BNC-Training, proposed by this Opinion.

- Group II: 400 (four hundred) hours for pedagogical practice in the area or the curricular component (BRASIL, 2019, our translation).

We can see that in Brazil, the legal issue is still in great dispute, not reaching consensus, as it seems to occur in Portugal. Regarding the reality of the schools, however, the situation of having teachers with pedagogical training for technical subjects suggest to be similar in both countries and makes us think about what the teaching view practiced in this type of teaching is and how these teachers develop knowledge for the job in which they work. Following, we present a summary of the analyzes undertaken here.

### **Final considerations**

"Compared studies cannot be carried out from a purely descriptive perspective, requiring a conceptual elaboration that gives meaning to the interrelationship and comparison of different realities" (POPKEWITZ; PEREYRA, 1992, p. 13, our translation). Still, the description is an essential part of understanding. We can say that on the theme of Professional Education, we found limited production that addresses the perspectives of organization, structuring, and teaching, comparing different national realities, with emphasis on the work of Pardal, Ventura and Dias (2005).

Despite this, the reforms recently implemented in Brazil resort to the argument of international models of "success" to support themselves, which makes it essential to bring comparative studies that can problematize these discourses, contributing to the understanding of the local, from a global perspective (BRAZIL, 2016a). Ignoring the context is enough to make things unequal, and make unequal equal things (BOURDIEU; PASSERON, 1979). Therefore, the first movement of the study was to briefly present the organizational contexts of Professional Education, at the level of secondary education, in Portugal and Brazil. Following, we explored the issue of teaching requirements for this form of teaching in both countries.

We conclude that the educational models of both countries have some similarities, but are in very different valuation contexts since Portugal is moving towards the majority insertion of its students in Professional Education. While Brazil, from the reform, seems to take the path of investing in the flexibility of high school curricula, as a response to the problem of "lack" of interest in young people in this educational stage (BRASIL, 2017b).

Still, we can affirm that Brazil, which had invested in one legislation that resorted to teaching professionalization for all teachers who worked in Basic Education, a stage in which we found medium level Professional Education, retreats with the new legislation, allowing the notorious knowledge. Portugal, despite having legislation that obliges all teachers of Professional Education working in secondary education to have a Master's Degree in Education in their respective areas, it seems to resort to Decree-Law No. 132/2012, of 27 June, for the temporary hiring of specialized technicians who provide teaching and training services in specific technical areas and, in this case, because they are not teachers, but trainers, there is no requirement to have a Masters in Teaching but to be certified by the Professional Training Centers, in courses of approximately 100 hours.

In this sense, we could think if this would not be equivalent to the notorious knowledge, understood here as the recognition of the know-how of highly specialized professionals in their areas and who, through their practice in the world of work, would add value to training at a given time, with the difference that Portugal points to the desired training for teaching, master's in Teaching, while Brazil standardizes what we can understand as a retreat to teaching professionalization.

It is also worth noting that the exercise of the teaching profession in Professional Education requires more than knowledge from the world of work, it requires knowledge from educational sciences as well as didacticpedagogical knowledge, necessary for the construction of teaching practice of specific contents.

We understand that teaching in Professional Education is a complex task and, because of that, arduous to define. Despite this, it must assert itself as a profession for which adequate training is necessary, thus passing through the domain of specific and pedagogical contents, without which the teacher ends up being a book reproducer or applicator of ready didactic methods, what empties the intellectual dimension of the teaching profession. It is the role of the State and the Institutions to guarantee spaces and times for the initial and continuing training of teachers, and should not be seen as an individual task, but as a collective commitment to the construction of quality education.

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Text received on 02/11/2020. Text approved on 10/20/2020.

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