

The formative profile of postgraduates and educational research in Brazil (1890 – 2016): challenges and potentialities

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ABSTRACT: *The present study seeks to conduct a discussion about the trajectory of Educational Research in Brazil over a period of approximately 120 years (1890-2014). For both are analyzed some milestones copies of the trajectory of this important dimension of education, which, in turn, be confused with the affirmation of identity of Education as an area of research in relation to Brazil. As to the sources used, these consisted primarily on secondary sources, i.e., data extracted from the specialized educational literature and also data bases relating to the topic analyzed, all of this as privileged technique employing the bibliographical research. Thus, the integral parts are: a) the educational research in Brazil: its trajectory in the ages 20 and 21; b) quantitative and qualitative aspects of research in education in Brazil today (dates from 2016).*

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I. INTRODUCTION

The research on education in Brazil has a rugged and irregular trajectory. Throughout the 20-century and beginning of the century 21 many of the research in the area went much more of an attempt to validate assumptions from other sciences (especially the psychology) using the educational phenomena (as much) as the field of application of theories that were in vogue in other countries (BRANDÃO, 2004).

The present work aims to achieve an overview of the development of educational research in Brazil, taking as a basis the historic period between 1890 and 2016. The empirical material were analyzed with a view to two groups of indicators: (a) historical milestones relating to the consolidation of Education as an area of research; b) current data about the context of Educational Research in Brazil between 2000 and 2016. The central problem was to understand the changes occurring in the field of educational research in Brazil in the various eras focused in this study. The secondary sources¹ used consisted mainly in historical studies that dealing directly and indirectly on the topic, and data on the landscape of the country's research extracted from the Lattes Platform of the National Research Council (CNPq)².

In relation to the methodological approach and to research techniques used in this study, it should be emphasized that the analytical methodology merges qualitative elements (such as the bibliographical research) and quantitative (as the measurement of parametric indicators about the research in education in Brazil extracted from databases and submitted to statistical treatment. Even though the quantitative part used recourse to treatment of frequencies, yet the bias of analysis does not exclude the interpretation as step resulting from the description of the data submitted.

The end are woven considerations that result from a critical analysis of the elements exposed and discussed.

II. THE RESEARCH IN EDUCATION IN BRAZIL: SOME HISTORICAL LANDMARKS AND CATEGORIES

In the field of humanities and social sciences, education is in an area of knowledge that has components of applied science, without which therefore does not receive any moment contributions of theoretical fields that are distinct from those linked to their primary object (which is nothing else than the teaching and learning). To understand how did the trajectory on the development of educational research in Brazil to analyze its multiple routes, especially in the relationship between the various "source" sciences (theoretical fields that influence the multiple visions and determinations relating to education) and the 'science-

object" leads (in the area of education applied to specific objects, such as: The Didactics and Teaching Practice)³. The following are identified those temporal marks and their impacts for the development of educational research in Brazil.

2.1. The *Pedagogium* and the Method of "Lesson of Things" (1980)

The need to create an agency responsible for deliberate and systematize the Brazilian education took the Crown in 1836 to create a General Council of Public Instruction (SANTOS, GOUVEIA, LEITE FILHO, 2008). This agency has its inspired in European enlightenment ideas, in particular in part of what is conventionally called enlightened despotism⁴.

The General Council of Public Instruction, little worked, giving much more margin to certain theoretical illustrationism and verbalism of its members than the effective actions of construction methods and pedagogical techniques. Who will act in the sparse and dwindling network of schools (Public and Private) existing at that time in Brazil. It was then that in 1890 under the aegis of Rui Barbosa is created the "*Pedagogium*".

This was an organization that was intended multifunctional. In terms of administrative configuration now holds the functions of the former General Council of Public Instruction, also would contain, from the point of view of infrastructure, an architecture and layout similar to the pedagogical museums until then existing in Europe (mainly in France with the Musée Pédagogique). With respect to their pedagogical dimension, the agency created in the last decade of the century 19 is formed in a diffuser pole of positivist pedagogical ideas and encyclopedists, embodied in the so-called "Method of lessons of things"⁵.

Despite the fact that the *Pedagogium* was short life, coming to operate effectively in the decade of 1910 (in 1918) and extinguished at the beginning of the decade of 1920, yet it is worth noting that this was the first experience directed to education and aimed (although in an inefficient), organize and systematize educational experiences developed in Brazil. Which makes it the first historical landmark of the institutionalization of Educational Research in Brazil. However, it should be indicate that the *Pedagogium* relationship with schools was tenuous, and it was not possible to help bring systemic organicist to the Brazilian education, nor for the sparse distribution of schools would promote mass schooling.

2.2. The Research Educational in decades of 1920 – 1930

The years 1920-1930 were marked by various educational reforms in the country. Such reforms were connected to the cultural and economic changes by which Brazil passed in recent years. Some internal political events, and an economic restructuring was underway, as well as various intellectuals scientific periodicals as representatives of progressive thinking this time causing major actions in the Brazilian educational scenario.

At political and economic level should be highlighted the fact that after the First World War and the Crisis of 1929 (events that brought serious damage to peripheral capitalist countries and dependent on the central powers). The Brazil in the years 1920 and 1930 passes through a revolution (in which Getúlio Vargas assumes the presidency and remains for approximately fifteen years in power). Also it should be noted that already in 1922 with the Week of Modern Art and the so-called "Anthropophagic Movement", new directions for culture were already being given to Brazil. In the words of ACÁCIO, we see then that:

In Brazil, a new angle emerges to think the country from the oligarchic crisis and the disappointment as to the possibility of the Republic realizing the ideal of a new society. The twenties of the twentieth century inaugurate the genesis of modern Brazil and introduce procedures, habits, visions, unpublished questions that mobilize generations, bring up new actors and the problematic of rights and social participation. The intelligentsia of the time is faced with the prospect of defining its social identity, attributing a certain missionary, non-market character. He thinks of the country, proposes the construction of a modern nation, intends to revise racism, criticizes academicism, but does not recognize the importance of the nascent working class ... Cultural production becomes politicized in the emergence of this new intellectual identity, which wants to build the nation, the people and the modern by reforming Brazilian society. The national question, present at other times, appears as a challenge, in several languages that explain *mestizaje*, imagine racial democracy, seek regional inequalities, Lusitanian, African, indigenous origins. In 1922, the accomplishment of the Week of Modern Art represents the public challenge that demonstrates the rupture with the current cultural standard. However, the ambiguity of the intellectuals to remain part of elite and to meet the people permeates the pressure movement for political participation, civil and social rights, morality in the treatment of the public. The organicist and anti-liberal ideology, which is radicalized in criticism, brings the perspective of the state as unifier of the country - in cultural, political, social terms - and constructor of the modern nation (ACÁCIO, 2005, p.05)

If in political and cultural level were expressive and striking changes occurring, similarly diverse educational reforms were happening in Brazil, with emphasis on the following: 1) Lourenço Filho Reform, of 1922: Occurred in Ceará and carried out for educator Lourenço Filho. Based in two strands: a) Experimental studies of psychology applied to 100 schools, with a view to perform parametric tests of intelligence; b)

Reformulation (and creation) of normal schools that apply benchmarking activities and exercises of the quotient of the Intellectuality (Q.I.). 2) Fernando de Azevedo Reform, 1928; held in the Federal District (which then was located in the former capital of Brazil, the city of Rio de Janeiro). This reform is based in both in a campaign of construction of school buildings and equipment as well as the promotion of a pedagogical renewal in that competes to primary education and normal. Deserves special mention the influence of Anísio Teixeira with active learning methods (in particular the method of projects whose influence is greater pragmatism of John Dewey).

In 1932, various intellectuals and educators, align the Manifesto of the Pioneers of the New Education. This document created and disseminated by the Brazilian Association of Education (ABE) brought great repercussion for the time due to their ferocious criticism by verbalism and academicism of teaching in this season, as well as the foundations of conservative standards of public instruction (ROMANELLI, 2005). Another important characteristic of this document relates to the fact that the said group of intellectuals conceives Education as science, science that suffers strong influence of Psychology and Philosophy. Finally, but no less important, it is important to mention that the document makes express reference to the construction of a National System of Education (goal today still haunted by our educators). Which would have to be established in organic form with a central guideline of the contents and forms schoolchildren commensurate to the different cultural realities in Brazil, in spite of the role assigned to the school in the formation of nationality. The influence of this document was such that the Constitution of 1934 would incorporate many of the principles handcuffed there, such as, for example, the principle of co-education (schools with mixed classes without discrimination by sex) and secular education.

Such temporal frame help to understand that the years 1920-1930 bring more than one elements to be incorporated into the research in education in the country: the status of scientificity of education begins to be discussed, even though only decades later can be consolidated this achievement.

2.3. Years of 1950 -1960

This was a decade of cultural effervescence and economically and that is reflected in part in relation to the development of educational research in the country (SANTOS & LIMA, 2016).

The association between pragmatism and developmental operated in respect of the Public Administration in line with the process of productive restructuring occurred in relation to the industrial sector of the economy (under the aegis of the financial capitalism of the type dependent), generate a scenario that would be fertile ground for a particular type of association between economic development and educational development, in this context is to be highlighted the central role that the Ministry of Education through its main agency of educational planning: the National Institute for Educational Studies – INEP⁶.

Among the main landmarks of this era are:

1) The initiative of induction to educational research applied across the network INEP-CBPE-CRPE'S⁷: This initiative resulted in a series of studies on themes linked to Social Sciences and Education, as well as the development of instructional materials and continuing training courses for primary and secondary teachers from all over the Country;

2) As a result of the action of this research network, we have the development of some campaigns such as the National Campaign of experimental schools (1953-1956), and campaigns of investigations and surveys as the campaign of the development of Secondary Education - CADES (1953).

In the ages 60^s, in particular after the military coup of 1964 occur some measures of great importance for education in Brazil, even though the political scenario of the country is absolutely dismal in respect to human right and fundamental guarantees of citizens. In this context, it is necessary to emphasize the influence of the University Reform of 1968 (Law 5.540/68), because the law that it performs the following movements:

1) Educational research in postgraduate level of institutionalization: this means that universities are to possession postgraduate programs and research in general.

2) Is established the credit system in universities, as well as departments replace the chairs, with this the guidelines of research, teaching and extension are to be bound to the administrative structure of the universities instead of being restricted to the formation of their teachers.

3) The research at the postgraduate goes through a process of increasing specialization, reflection of Departmentalization of the universities, and this process has mainly impact especially the area of Humanities and Social Sciences, which directly affects the Education, a split that follows with greater strength in the decade of 1970.

2.4. Years of 1970

With the *stricto sensu* post-graduation in Education situated in several universities and institutes, the research in education be institutionalized (with emphasis to the IESAE/FGV⁸, PUC-Rio, USP, UFF and UFRJ).

As the main result of this process must be highlighted the content of theoretical production that privileged quantitative methodologies and a focus on production and interpretation of statistical data, as well as the measurement of scores of proficiency and educational indicators of large scale (especially as regards the evaluation of flow at school, illiteracy and school effectiveness).

If on the one hand the demands of government had a guideline based on technical rationality and manipulated, and that for other products in the field of education is presented as a rule as elements of programed instruction to be applied to large populations in the form of didactic materials produced from statistical surveys. It should be noted, however, that at the end of this period, the advent of new methodologies of teaching and research were gaining strength in Brazil, which prioritized a more qualitative approach and critical, as will be seen below.

2.5. Years of 1980

The years of 1980 marked in Brazil a change important in political terms and cultural. After the amnesty process of political prisoners of Military Coup of 1964 (and that it took place in 1979) there was a growing political opening, which culminated in the democratization of the country with elections in 1985 (although have not been direct elections as he cried the population through the movement of Direct Elections Now). With this, diverse thinkers returned from his exile and could more openly work from their theoretical matrices, in large part of Marxist influence or neo-Marxist, having in common the critical bias.

The Emergence of the critical paradigm (Marxist and neo-Marxist), led the area of education in this period to an increase of studies about social inequality and its relationship with the school failure. Also deserve highlighting the studies on the role of ideology in school curricula, as well as are worthy of note the influences of theories of socio-constructivist (Piaget-Vigotsky-Antwerpen) and predominance of qualitative approaches in understanding analyzes⁹.

In view of these factors, it is important to consider that the decade of 1980 in terms of educational research was characterized by a shift in direction (methodology) contrary to (in some cases) there is a concentration of studies that required exacerbated any type of quantitative approach.

2.6. Years of 1990

Under the aegis of the neoliberal economic theses (in particular those relating to a model of state whose sphere of social action that reduces and on the other hand extends control over civil society). The year of 1990 in Brazil portray a context of reducing investments and precarious material conditions in Public Universities (this phenomenon is deepened in the two Governments of President Fernando Henrique Cardoso and which corresponds to the period of 1994-2002). In any case, the years of 1990 was characterized as those in which there is a consolidation of Educational Research in Brazil, both as regards its thematic variety, as regards their methodological approaches.

As regards the major innovations in the field of educational research in Brazil should be highlighted the influences of Critical Theory in the approaches of educational diversity: multiculturalism, interculturalism, gender studies. Also deserves mention the resumption of quantitative studies (especially in large scale). On the other hand, the great innovation in methodological terms was the emergence in large-scale studies combining qualitative and quantitative approach. The following shall be presented a panorama of Educational Research in Brazil in the period between the beginnings of the Century 21 (year 2000) until the year 2016.

III. THIS ACTUALITY OF EDUCATIONAL RESEARCH IN BRAZIL: CHARACTERISTICS, DATES AND INDICATORS

The year 2000 until 2016 there was a major expansion in research in education in Brazil. There was a quantitative growth (increase the number of doctors, increase in the number of research groups and consequent increase in the volume of scientific production in the country).

The following will see some data that show the panorama of Research in Education in Brazil¹⁰, laminated from some groups of core indicators so that you can understand the current panorama of scientific research (in general terms) and the research in education in Brazil.

3.1. Some data about Masters and PhDs in Human Sciences in Brazil:

In order to analyze the current panorama of Research in Education in Brazil, as has already been said, there has been recourse to secondary sources based on data from the Lattes Platform of CNPQ. The following data were systematized and integrated into tables that concentrate the absolute and relative frequencies for an important indicator concerning research in Brazil: Master and Phd in Human Sciences. Follows in the next subsection, the group of tables concerning this indicator¹¹.

3.1.1. Quantitative dates of geographic distribution of Masters in Brazil

In such a way as to give sequence to this study are presented two Tables, which intersect data relating to the number of teachers in Brazil in relation to their geographical distribution, considering as a criterion the profile of training. Thus, the first table brings together the teachers trained in all the major areas and the second Table considers those who were trained in a large area of Human Sciences.

Table 01 – Total number of Masters trained in Brazil (All Training Areas) by Geographic Region

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	364.827	100,00
Midwest	36.319	9,95
Northeast	69.913	19,16
North	20.802	5,70
Southeast	163.133	44,71
South	74.660	20,46

The Table 01 relating to the total number of certificated masters (in all areas of training) currently (whose curricula can be registered in the Lattes Database of the Brazilian Government) point to two important data:

- 1) The 364,826 correspond to 0.17% of the total population of the country, which demonstrates a great stratification with respect to educational opportunities;
- 2) The data relating to the distribution of these teachers point to huge disparity in what refers to its geographical distribution. If they are considered the absolute numbers in the region with the largest number of teachers, who is the Southeast region (163,133) realizes that this geographical region (which includes the cities of Rio de Janeiro and São Paulo) concentrates 44.71% of the total quantitative against 20,802 teachers trained in the Northern Region (which equates to 5.70%). When considering this disparity it realizes that the Southeastern region has more than eight times the amount of teachers trained in the Northern Region, which implies the need for policies of fairness in relation to this profile formation. Let us look at the following data relating to the number of teachers trained in a large area of human sciences.

Table 02 - Total number of Masters in Humans Science in Brazil for Geographic Region

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	61.772	100,00
Midwest	6.572	10,63
Northeast	12.632	20,44
North	4.004	6,48
Southeast	26.245	42,48
South	12.319	19,94

The data relating to the training of teachers in the Human Sciences point to a profile of geographic distribution similar to what is observed in relation to the total number of master formed to consider all the major areas. Brazil has 61.722 Masters whose curriculum is recorded in the Data Base Lattes, among these the regions Center West and North respond by 6.573 (10.63%) and 4.004 (6.48%) respectively against 26.245 (42.48%) Masters located in the Southeastern region, which demonstrates that the formation to a large area of Humanities at the intermediate level, (taking into account that the maximum titration of a teacher/researcher is a Doctorate) is strongly concentrated in the Southeastern region. Lacking, thus enhancing the political of promotion to the titration of Masters other regions of the country.

In the next subsection, there is an analysis of the same data, but with respect to doctors.

3.1.2. Quantitative dates of geographic distribution of doctors in Brazil

The training of doctors represents the last stage of schooling in Brazil (it should be remembered that Doctorate is not title, but an improvement carried out by Doctor). The researchers at doctoral level are those who rule to enable public tenders for teaching, as well as are the ones who lead research groups and develop projects funded by development agencies. Due to this, the knowledge of the data for this indicator provides important information about the scientific research in Brazil.

Table 03 – Total number of Doctors in Brazil (All Training Areas) by Geographic Region

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	218.581	100,00
Midwest	19.295	8,82
Northeast	36.663	16,77
North	9.054	4,14
Southeast	112.518	51,47
South	41.051	18,78

Brazil has in absolute numbers 218.581 doctors, which represents a percentage of 0,10% of the Brazilian population, which indicates that, as occurs with the percentage of Masters, this is a formative stage reached by a very small number of Brazilians. Which reflects the existence of an educational system whose actions of fairness need (and very) be strengthened in relation to University Education. The analysis of the geographical distribution of doctors from Geographical Regions gives an account of enormous disparities between the regions of the country (similar to those that were seen when they were examined data relating to the masters).

The southeast region concentrates 112.518 doctors (51.47%) of the total, while the regions Center West and North have 19.295 (8.82%) and 9.054 (4.04% of the total number of doctors respectively). If weighted in relation to the Northern region the number of PhDs from the East is approximately twelve times the number of holders of this qualification in the Northern Region, which indicates that in the last level of schooling the regional disparity is even more intense. Let us see if this tendency is expressed when they are analyzed data relating to doctors in Human Sciences.

Table 04 - Total number of Doctors in Humans Science in Brazil for Geographic

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	34.136	100,00
Midwest	3.370	9,87
Northeast	6.239	18,27
North	1.645	4,81
Southeast	16.251	47,60
South	6.631	19,42

The total number of doctors trained in a large area of Human Sciences in Brazil is 34.136, which expressed in relation to the Brazilian population a percentage of 0,016% of the total. The Southeast Region (as in all other indicators responds by 16.251 (47, 60%) of doctors trained against 3.370 (9, 87%) and 1.645 (4, 81%) of the Regions Center west and north respectively. It is also notes wide disparity, insofar as the number of PhDs in the southeastern region corresponds to approximately ten times the amount of doctors of the Northern Region, also demanding actions to promote the development of researchers in other regions than the East.

After this examination of the raw data of formation of Masters and PhDs in Brazil, both in that corresponds to the overall as to what concerns the subtotal regarding large area of Human Sciences (in which is confined to the area of Education), disaggregated data are analyzed and refined, referring to industry and to the masters and doctors in the area of education.

3.2. The training of Masters and Doctors in Education in the country and its insertion in Higher Education

In this part of the work will be discussed some of the relations between the profile of formation of masters and PhDs in Brazil and its relationship with the sector in Higher Education, because as has already been indicated, in Brazil the researcher almost exclusively depends on the teaching activity as articulated to his office. So let us focus on the data relating to the training of teachers and their insertion in Brazilian Higher Education.

3.2.1. Some data about the researchers in education (and other areas) at the level of the Masters in Brazil

Engage in this subsection, with an analysis of the geographical distribution of the Masters and PhDs in Brazil by area of training in 2016, with special attention to the large area of Humanities and Education, because they are the privileged object in this work as the main empirical instance.

Table 05 -Numbers of Masters in Brazil for Training Area in 2016

Training Area	Absolutely Frequency	Relative Frequency (%)
Humans Science	4.098	100,00
Education	1.628	39,72

As you can see, the area of education is quite expressive when it considers the training of Masters in Brazil, accounting for 39, 72% of the quantitative of these.

In this sense, once again, it must be emphasized that this is an indicator that points to the increase of the training of researchers in education in the country; in spite of the fact that the Private Higher Education, this is professional profile, that occupies the greatest number of jobs. Let us look at the following data relating to the training of doctors for the large area of human sciences and to the area of education.

Table 06 – Numbers of Doctors training in Humans Science and in Education in Brazil in 2016

Training Area	Absolutely Frequency	Relative Frequency (%)
Humans Science	2.080	100,00
Education	759	36,49

With respect to the number of doctors trained in 2016, there was a significant quantitative also, to the extent that 36, 49% of these are concentrated in the area of education, which means that this is an area which has great impact in relation to the profile of formation of human sciences as a whole when we consider its relationship with this large area.

In this sense, the policy of training of master in education has to do with the need to strengthen this area with a view to fostering the development of the country in relation to the needs of learning networks, systems of education and schools. Then we will see how to distribute the masters in Brazil based on two criteria: geographic location and economic sector of activity.

Table 07 - Total number of teachers in Brazil (all areas of training) by geographical region and area of expertise: Public Higher Education

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	60.345	100,00
Midwest	6.766	11,21
Northeast	15.850	26,26
North	4.125	6,83
Southeast	20.532	34,02
South	13.072	21,66

Initially there is to be emphasized that the absorption of Masters trained in Brazil by the public higher education is 16.54%, which demonstrates that the Public Service is not the primary locus of insertion of this profile formation. When they examined the distributions of these teachers present in public higher education in geographical regions of Brazil, even though there are disparities, it is possible to say that these are a little smaller when compared with the raw data for training of teachers. Thus, we have the Southeastern Region concentrating 20,532 (34.02%) of teachers working in this economic sector against 6,766 (11.21%) and 4,125 (6.83%) in the North and Central West regions respectively. Also deserves mention the fact that the South region there is also a considerable number (13,072 or 21.66% of the total) of teachers working in Public Higher Education (there is no data describing this activity but as a rule such teachers act as teachers and researchers, to the extent that in Brazil there is no specific career for researcher).

Then, in order to refine a little more data about which we have tackled, presenting a table with data modeling criteria similar, but applied to teachers trained in the area of Humanities. Let us then toward the next Table.

Table 08 - Total of Masters in Humans Science in Brazil for training área: Higher Education Public

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	9.869	100,00
Midwest	1.239	12,55
Northeast	3.093	31,34
North	819	8,29
Southeast	2.816	28,53
South	1.902	19,27

As perceived through the examination of the table of number 08, there is a given that draws attention by contrast with the entire tendency toward the southeast region concentrate the majority of Masters (and doctors).

As you can see, the sector of Public Higher Education, the Northeast region concentrates the largest percentage (31.34) or 3,094 teachers working, not very distant, however, the percentage of 28.53% (or 2,816 teachers) expressed by the Southeastern region for this indicator.

This indicates that the impact of policies to promote developed since the beginning of the Century 21¹² meant that the Public Universities in the Northeast could count with a greater number of teachers in their frames. Thus, the large area of Human Sciences (which influences the area of education in an indirect way) has greater equity in respect of the training of teachers and their insertion in Public Higher Education (in relation to other indicators relating to this level of training).

Let us look at the following table that allows you to examine the profile of researchers at master level in Brazil with respect to its performance in Private Higher Education.

Table 09 - Total number of Masters in Brazil in all Training of Areas by sector of activity: Private Higher Education

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	42.948	100,0
Midwest	2.851	6,63
Northeast	5.732	13,34
North	1.770	4,12
Southeast	21.410	49,85
South	11.185	26,04

The reading of the data in Table 09 shows that the distribution of teachers working in Private Higher Education in Brazil has a strong geographical concentration in the Southeastern Region (21,410 or 49.85%). Thus, the professional performance of Masters in the public sector gives the impression that the private species that absorb priority mode this type of labor are in their great majority in this region. Which causes a direction of labor linked to these job opportunities, flocking to this region and, consequently, producing research in this geographical location in order of priority.

Table 10 - Total of Masters in Human Sciences in Brazil by sector of activity: Private Higher Education

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	6.677	100,0
Midwest	491	7,35
Northeast	899	13,46
North	296	4,43
Southeast	3.309	49,55
South	1.682	25,19

As shown in the table, the Masters in Human Sciences working in Private Higher Education follow the trend of other indicators in order to point to strong concentration in relation to the geographical location, with almost half of these (49.55%) located in the Southeastern Region. This concerns the correlation between the concentrations of the Gross Domestic Product of this region, which affect the dynamics of the private sector makes it more private species is concentrated in this region. In this respect, there is still that scoring an element that is in the legal sphere but impacts yet this dynamic: By law, universities are forced to remain in his paintings at least 1/3 of the Masters or doctors among their teachers¹³. Thus, by legal requirement a good part of the Higher Private Education prioritizes the hiring of teachers in their frames, often at the expense of hiring doctors because they are more costly from the point of view of remuneration.

3.2.2. Some data on the Brazilian researchers at doctoral level in terms of their inclusion in Higher Education

The data on doctors will be analyzed and commented below. In view of the fact that rule these are the leaders of research nuclei, project coordinators and managers of units of Higher Education, their quantity and distribution affect largely in the research in education in Brazil. Let us then toward the discussion of the total number of doctors working in public higher education, as stated in the table that follows.

Table 11 - Total Doctors in Brazil (all areas of training) by sector of activity: Public Higher Education

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	90.809	100,00
Midwest	9.358	10,30
Northeast	19.042	20,96
North	2.692	2,96
Southeast	38.513	42,41
South	21.204	23,35

As we can see, in Public Higher Education, the number of doctors is approximately 30% higher than that of the Masters. This is explained in great part by the fact that many of the public tender for teaching in higher education in Brazil have as a minimum requirement the title of Doctor. In this way we once more the great concentration of doctors in Southeastern Region expressed as a percentage of 42.41% (38,513) against 2.96% (2,692) of doctors located in the Northern Region.

The choice in order to highlight the region with greater and with a smaller number of doctors gave himself to the extent that lets you know the huge regional disparity in relation to this indicator.

The southeast region concentrates approximately twenty times the number of doctors working in Higher Education of the North region. Which means there is a need for more Higher University in this geographic region, as well as greater stimulus to the doctors (who par excellence are the drivers of scientific research) is set at other locations than those belonging to the Southeastern Region.

The following are discussed the data concerning the geographical distribution of doctors in the Human Sciences in the public sector of Higher Education.

Table 12- Total of doctors in the Human Sciences in Brazil: Public Higher Education

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	14.710	100,0
Midwest	1.850	12,57
Northeast	3.560	24,20
North	468	3,18
Southeast	5.504	37,41
South	3.328	22,62

In relation to the PhDs active in Public University whose title is related to the Great Area of Human Sciences (and of which approximately 30% belongs to Education), it is necessary to observe a geographical distribution a little more equitable in relation to the total quantitative of (5,504). These doctors, but the South and Northeast regions account respectively for 22, 62% (3,328 doctors) and 24, 20% (3,560 doctors).

This more equitable distribution is due in part to the fact that the federal education system (and that is responsible for a large part of public HEIs) the Doctor's degree and the similar parameters in relation to the selective processes of these HEIs make with whom in these three there is a less unequal distribution of teachers. The following are the data about the doctors working in the Economic Sector of Private Higher Education.

Table 13 - Total doctors (all areas of training) in Brazil by geographical region and sector of activity: Private Higher Education

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	23.841	100,00
Midwest	1.214	5,09
Northeast	1.963	8,23
North	463	1,94
Southeast	13.904	58,31
South	6.297	26,41

In the sector of Private Higher Education, the number of PhDs obeys a strong geographical concentration incident in the Southeast region. Such concentration reaches 58.31% (13,904), which expressed more than twice the second region (Southern Region) with the highest number of doctors working in this economic sector (6,297 doctors or 26.41%) and approximately thirty times more doctors that in the Northern Region (which accounts for 463 doctors or 1.94% of those who dedicate themselves to the work in Private Higher Education). This trend once more points to the need for policies to stimulate the fixing of doctors outside of major population centers in the Southeast region. Let us see if this trend remains when they are analyzed data relating to the certificated doctors in the area of Humanities, which, as has already been pointed out, has in its composition many researchers linked to the area of education.

Table 14 - Total number of doctors in the Human Sciences in Brazil by geographical region and sector of activity: Private Higher Education

Geographic Region	Absolutely Frequency	Relative Frequency (%)
Brazil	4.489	100,00
Midwest	304	6,77
Northeast	362	8,06
North	66	1,47
Southeast	2.511	55,93
South	1.246	27,75

In Private Higher Education, when it refers to the action of the doctors of the large area of human sciences the tendency of stratification and geographic distribution observed in the data relating to other indicators below, i.e., the southeast region concentrates more than half of the doctors in the Human Sciences (55.93% or 2,511). If compared with the distribution of these researchers in the Northern Region (for example) there is a smaller proportion than thirty times the amount of doctors from the Southeast (66 against 2,511). Once more, it becomes clear that the main challenge that launches on the Research in Education (in respect to their formative profile) is becoming more widespread throughout the country the excellence of large centers located in the Southeast region.

IV. CONCLUSION

This work was not intended to exhaust all possibilities of knowing the Research in Education in the Country. The ambition expressed here did not even come to undertake a "State of the Art" of Research in Education in the Country, Quite the contrary, what you tried to do was, from some historical milestones and indicators relating to the profile of formation of masters and PhDs in Brazil (with special attention to the large area of Humanities and Education). To provide subsidies for the understanding of the current scenario related to this theme, as well as identify challenges and possibilities that are present today. Thus, it should be pointed out that despite the increasing evolution of Education Research in quantitative and qualitative terms, there are some challenges to overcome.

The first of these concerns the need for expansion of the international impact of productions, which implies greater dialog with the international productions (mainly in Latin America). There are several agreements being developed (and the Binational Colloquium Brazil-Colombia, concluded between the UFF and the UMNG is an example of a successful initiative) however there is still the need to intensify the actions of joint research.

As seen the great challenge that arises in Brazil today is to promote equity in respect of the training of teachers and doctors in its various geographical regions. There are quality training, there is a considerable number of post-graduate being graduates. And now they must (the example of what occurs in the Program MINTER and DINTER) if fixed in interior regions of the country, which will only be possible with the development of a structure of research and work (in spite of the preponderant role in the development of the labor market in these regions) that allows these researchers that lay outside the richest regions of Brazil after graduation.

Finally, but no less important, it should be emphasized the fact that since the year 2015 Brazil goes through severe economic difficulties and that the current framework of political instability and economic demand for Higher Education in Brazil as a whole, the need to overcome the difficulties arising from the current economic downturn and loss of investments in science and technology caused by the current context of political-economic crisis mentioned.

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¹Julio Arostegui in his book entitled: The Historical Research (AROSTEGUI, 2000) indicates that secondary sources are all those originated from a record already processed by another investigator(s) and that therefore already include in its scope a systematization effort prior to the action of the researcher who will use it (ex: statistical treatment given to a series of documents).

²For more information, please see: <http://estatico.cnpq.br/painellattes/>

³Anísio Teixeira on his famous text called the "Science and Art of Educating" (TEIXEIRA, 1957) details of how skillful the interfaces of Education as a field of knowledge emerging.

⁴This is a movement established by several European monarchies, based on "the granting of rights" and which resulted, among other things, the idea that people should be literate and, therefore, enlightened as an even better knowing the law which should obedience (ARANHA, 2005).

⁵The method of lessons of things consisted in the use of concrete activities directed to the education of children. Such activities based mainly on the use of illustrations relating to animals, plants, minerals and historical figures which to present by professor comprised the "lessons", relating to 'things', which were shown to the students.

⁶For more information, I invite you to read the article pragmatism and developmentalism in Brazilian educational thought of the years 1950/1960 (MENDONÇA et ali, 2005). In this are detailed the relations between these two strands of thought applied to public administration in respect of the construction of educational actions in Brazil of the years 1950-1960.

⁷The Brazilian Center for Educational Research (CBPE) consisted in the section of the INEP dedicated to the organization of campaigns of investigations and surveys on the situation of education in the country. The CBPE per turn is articulated in a network of Regional Centers of Educational Research (CRPE). The idea was from regular surveys and the development of educational campaigns to compose a system of researches able to subsidize future reforms of education in Brazil. For more details, see the book of libânia Nacif Xavier titled: *Regionalization of research and pedagogical innovation: the centers of Educational Research of INEP (1950-1960)* (XAVIER, 1999).

⁸The respect of IESAE, indicate that this was the initials for the Institute of Advanced Studies in Education, created in 1971 and sustained by the Getúlio Vargas Foundation. Possessed teacher team of renown and its main characteristic was to direct educational research to problems of the Brazilian reality, having been throughout the decade of 1970 a national and international reference in the field of research and teaching in the area of education (FAVERO, 2001).

⁹The qualitative methodological approaches are characterized by an emphasis on understanding of certain phenomenon at the expense of measurement (GEWANDSZNAJDER & ALVES-MAZZOTTI, 1997). Because this is a result of this approach analyzes of data "understanding", i.e., those that seek the understanding of the object under study from the study of its context (historical, cultural and social) and factors intrinsic to this, all integrated in a binomial description and interpretation.

¹⁰These data were extracted from the site of the National Research Council (CNPq): www.cnpq.br/lattes

¹¹Source: <http://estatico.cnpq.br/painellattes/comparacao/>

¹²And in this sense, it must be stressed the important role of training programs for teachers and doctors in cooperation between universities in the Southeast and universities in the North and Northeast of the country, in particular the minter (for training teachers) and the DINTER (for training of doctors, both maintained by the Ministry of Education of Brazil).

¹³All attention is given to the Art. 52. II of Law of Directives and Bases: "one-third of the faculty, at least, with academic degree of master's and doctoral degrees (BRAZIL, 1996)".

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