

## **CNPq's productivity scholarship in the area of Education: an analysis focusing on Basic Education\***

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### **Abstract**

The present work discusses the possible correspondence between the production of knowledge in the scope of programs of graduation in Education and their contribution for the improvement of Basic Education in Brazil, through the stimulation to research made by promotion agencies, particularly the CNPq – through the Productivity in Research Scholarship (PQ). It also aimed to compare the process of granting support to individual projects in Brazil and possible symmetries with projects supported by the European Union. All these actions aim to demonstrate how the area of Education has positioned itself in the context of Brazil's scientific production, in terms of absolute numbers and thematic categorization, and how all these factors can influence, or already do, in the process of improving Basic Education. The data was collected from CNPq's C&T Investments' site, from *Lattes* Platform and from CAPES' evaluation. After collecting the data it was made a categorization of the projects. Among the results can be observed a concentration of those who receive PQ Scholarships, and also the PQ scholarship holders' scientific production, in the regions Southeast and South. Regarding the initial attempt to categorize CNPq's research projects in the area of education relating them to the PQ Scholarships, it was observed a great valorization of themes that continue the conceptual aspects of dissertations and thesis of their researchers and the orientations that conduct them. In the context of Basic Education, there was great thematic coverage of subjects that range from teaching to international comparisons.

### **Keywords**

Higher Education – Productivity in Research Scholarship (PQ) – Basic Education.

\* English version by Alexandre José da Silva Conceição.

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## Introduction

In the last 30 years, since *1988's Federal Constitution*, Higher Education in Brazil has led several changes both in the scope of undergraduate education and graduate education. Beyond having expanded the number of students sixfold, Brazilian higher education system is the fifth largest in the world, with a little more than 8 million students, only behind China, India, United States and South Africa. In this period, according to Trow (2005), it changed from an elite system to a mass system. With the objective 12 in the Plano Nacional de Educação – PNE (Law nº 13.005/2014), the nation aims to reach an universal system. However, specifically in graduate education, higher education also has received praise for its quality, due to a consistent conjunct of policies that allowed its growth/quality (BALBACHEVSKY, 2014). The effort Brazil has made in the last years to expand access to Higher Education, consolidate a graduate education system, potentialize the number of masters and doctors and provide an innovation system to the country, contrasts with the low quality of Basic Education's indicators.

Such questions are part of the area of knowledge educational research in Brazil, conducting educational policies in several directions. In this sense, Schwartzman (2001) stresses the need for a historical approach to the constitution of higher education and graduation studies in Brazil, emphasizing the relation between the creation of educational policies' legal landmarks with the bounds between science, culture and national development project, having the higher education as focus.

Kuenzer and Moraes (2005) also elaborate on the subject, showing us how the history of Coordenação de Aperfeiçoamento de Pessoal de nível Superior (CAPES)'s creation and evolution is identified as the consolidation of graduate education in the country, not only destining resources and conducting political actions, but also as decisive for the definition of areas of knowledge in the country. Such authors also affirm that the incentive to research policies, with the funding of scholarships and programs for graduate education, and formation of teachers contributed to the composition of the very epistemological statutes of several areas of knowledge. Under another perspective, Gatti (2001) highlights the need to consider in the analysis of the field of research the subject of the application of investigations' results, to emphasize the social impact in the area of education.

Colistete (2016) shows that Brazil kept the condition in educational terms that it had during the centuries XIX and XX, that is to say, among the nations with the worst educational indicators in the world. However, if it is true that the production of knowledge in the context of university favors the generation of economic assets, that is, the knowledge transforms itself in something materializable on the production field; the intellectual assets produced on the field of Higher Education can generate ideas or important changes to also improve Basic Education. Considering its importance, this subject was theme of a specific chapter in the Plano Nacional de Pós-Graduação – PNPG 2011-2020, that pointed the low binding of the educational field's production regarding the problems that exist in the context of Basic Education (CAPES, 2010).

To face this challenge, this work aimed to reflect about the stimulus to research in Education – through the research projects funded by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) – aimed to identify a correspondence between the production of knowledge on the field of Education, in the context of post-graduation programs, and its contribution for the improvement of Basic Education. In this sense, were grouped data from the present outlook of the system of incentive to research made by promotion agencies, specially the CNPq – through one of its mechanisms, the Productivity in Research Scholarship (PQ) – and how Basic Education has been presented in the context of the PQ scholarship holders' individual projects.

### **The dilemmas of Basic Education in Brazil - 30 years expanding the access to education**

Attention to the needs related to the context of universal basic education In Brazil started late, very limited manner and under a particularly slow pattern (TAFNER, 2018). Only in the 1990's decade, with the promulgation of Law nr nº 9.394, of 20 December 1996, also known as LDB/1996, were established in the context of contemporary educational Brazilian policies the national education's guidelines and basis, which constituted an important landmark both in the definition of new educational objectives for the entire country, both in the aim of programs and projects developed by the Union, States, Federal District and Municipality (BRASIL,1996). Through the following decades, the expansion and consolidation of the right to education, the strengthening of initial and continuous formation policies and several other policies were built. These opened way for the incorporation of historically repressed social demands, and also created the possibility of new demands, as little by little the worker class *en masse* had more access to basic and higher education.

Labor of intense confrontations of interests that defined and consolidated in the 1988's Federal Constitution, LDB/1996's political building reached its final form in the context of the Brazilian State's Reformation, in the years of neoliberalism's consolidation. Besides being an inherent part of the national project at the time, it also incorporated elements that were agreed during the World Conference on Education for All, done in Jontiem, Thailand, in 1990, mainly under the auspices of United Nations Educational, Scientific and Cultural Organization (UNESCO) and also by the World Bank. The Jontiem Conference created the basis for the Programa de Educação para Todos's implantation that was structured as a web of countries and was launched in the occasion. Besides drawing objectives with the aim of internationally systematize a complex system for management of the area the Conference also launched the basis for a renovation in basic education's content, with documents that followed the concept and program of "basic learning needs". The event also launched action axis targeted for: basic education's universalization, democratic management of education and the improvement of teachers' formation and career (MELO, 2004). Such principles were also incorporated in LDB/1996.

However, only at the beginning XXI century, with the new plans for the nation's project, education's budget returned to rhythm that allowed the compromises signed in

international conferences to gradually be fulfilled. Over the decades, the low investment in basic education was pointed as the main responsible for the low qualitative results, however, the present expenditures with education, if we consider the Gross Internal Product (GPD), are aligned with the international context, for we today expend “three times more for basic education student than ten years ago” (TAFNER, 2018; SCHWARTZMAN, 2016, p. 12). Although the investment per student has increased, and also the global investment, the value per capita by student compared to the international patterns represents only 13 of what the developed countries practice. (OCDE, 2014).

Adding to this, the “freedom to learn, teach, research and divulgate the culture, the thought, the art and the knowledge”; the “school education professional’s valorization” and the praise to democratic management as principle provoked many changes in school education, and likewise in many other institutions of the field (BRASIL, 1996, art. 3, inciso VII). Between the changes, the obligation for higher formation in a licentiate course to exercise the teaching career in basic education, since kindergarten, stimulated teaching formation programs, sometimes financed by the Union, sometimes drawn by the Institutions of Higher Education (IES) in covenant with States, Federal District and Municipalities, that materialized also in the establishment of the Piso Salarial-Profissional Nacional (PSPN) for public teaching, that was result of the Constitutional Amendment (EC) nr 53 of 19th December 2006, and the regulation originated from Act nr 11.738, of 16th July 2008 (SILVA; BRITO, 2018). Under this point of view, according to data from the *Censo da Educação Básica* of 2017, Brazil has more than 2 millions of teachers in the scope of basic education, with 77,5% of these teachers having superior education. According to data from the Observatório do PNE 2015/2016, if we take into account higher formation in the specific field that they teach this percentage drops considerably, with 46,9% of the teachers of elementary school and 54,9% of high school fitting inside this classification (INEP, 2017).

It is worth highlighting that the actions in teachers’ formation and the interest in the investigation of basic education were expanded by the Brazilian IES through the years. In 2006, the Sistema Universidade Aberta do Brasil (UAB) was created under the CAPES’ responsibility – through the Decree nr 5,800, of 8th July 2006 – and in 2007, from the Act nr 11,502 of 2007, that attributed to CAPES the responsibilities of creating and promoting policies for teachers’ initial and continuous formation, and also to stimulate the valorization of teaching, was created the Diretoria de Educação Básica Presencial, expanding this way its basic lines of action and boosting the need of actions related to national basic education’s improvement (BRASIL, 2006, 2007). Besides the institution of the Plano Nacional de Formação dos Professores da Educação Básica (PARFOR), other specific projects were supported by CAPES to bind the actions of under undergraduate education and graduate education in the formation of teachers, such as the Observatório da Educação, Prodocência, PIBID, Novos Talentos, LIFE<sup>2</sup>, among others. Despite the significant changes that happened

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**2-** *Life* - Programa de Apoio a Laboratórios Interdisciplinares de Formação de Educadores; Programa Novos Talentos, has as goal to support proposals for execution of extracurricular activities for basic education’s teachers and students; Pibid - Programa Institucional de Bolsa de Iniciação à Docência, aims to proportionate to the students of the first half of the licentiate course a practical approximation with the basic education public schools’ routine and with the context they are insert; Prodocência - Programa de Consolidação das Licenciaturas, whose finality is to promote innovation and improvement of the quality of the teaching formation courses, in the perspective of teaching career’s valorization; Observatório da Educação, has the

in the last 30 years in public policies oriented for the educational context, the quality of education still is the great challenge of Brazilian education.

Brazil initiate its process of industrial development without having structured a learning system that offered the necessary sustentation for its development, in other words, there wasn't a consistent national education policy that was capable of meeting the innumerable demands that were done, not being possible to meet the quantitative aspects – imposed by the need of education's universalization – and qualitative – essential for a learning system that was support for the interest and objective of the nation that was being built (TUPPY, 1998). Only with the 1998's *Federal Constitution* (BRASIL 1988)'s promulgation was the education put as a fundamental right, being a priority to ensure a quality standard. This historical process shows that in Brazil there was not an initial concern with the education's quality.

When we analyze the Programa Internacional de Avaliação de Estudantes (PISA)'s results we observe that since its first edition the Brazilian Students are placed among the last places in the rankings of reading, math and sciences. In 2015, for example, Brazil achieved the 66º place in math, 59º place in reading and the 63º place in the ranking in which participated 70 countries (OCDE, 2016). The Act nr 13.005, of 25th June 2014, that instituted the Plano Nacional de Educação - PNE, set goals to be met until 2024. In what concerns the goal 7, which deals with the Índice de Desenvolvimento da Educação Básica – IDEB's reach, directly related to a quality standard, only in the elementary school's initial years there were advances. In the other stages, meeting the quality goals set by the PNE is far from being reached.

## **Current overview of the promotion to resear and formation of human resources in education system**

In 30 years since the Constitution Brazil has multiplied sixfold the number of students and in the last decade's period, the increases were more significant. Between 2003 and 2016, the under graduation registrations doubled, going from 3,9 millions to 8 million students (INEP, 2018). This expansion was propelled by the growth in the number of registrations in the public and private universities. According to Castioni (2016), in the scope of public universities, the recent expansion of Brazilian Public University – started in 2007 through the Plano de Desenvolvimento da Educação (PDE) and the Programa de Apoio a Planos de Reestruturação e Expansão das Universidades Federais – REUNI, from the Decree nr 6.095/2007, one of the 42 programs launched in the PDE's context, in April 2007 and that produced two meaningful impacts: the rise in the undergraduation vacancies and a greater possibility of enrolling in graduation, more specifically in *stricto sensu* formation.

In the scope of graduate education, between 2003 and 2016, happened a rise of circa 50% in the total number of graduates. Only in 2014, 50,2 mil masters and 16,7 mil

objective of promoting studies and researches in education, that use the infrastructure available of the Instituições de Educação Superior – IES and the INEP's available databases. The program aims, mostly, to proportionate the articulation between post-graduation, licentiates and basic education schools and stimulate the academic production and formation of post-graduate resources, in the level of master's degree and doctorate.

doctors were graduated, totaling 66,9 mil graduates (CAPES, 2017a). In the context of the area of Education, there was a meaningful growth in the last years of graduate education in Education programs, both academic and professional. This growth was potentialized by the enormous quantity of professors that were hired, around 40 thousand, with title of master and doctor by the universities and federal institutes. The CAPES evaluation made in the quadrennium finished in 2017 evaluated 244 education courses, a growth of 34% in comparison to the previous evaluation (2011 a 2013), mostly belonging to public institutions, either federal or state (CAPES, 2017b). Regarding the titulation, the programs in the area of Education are responsible for more than 4 thousand titulated, being circa of three thousand masters and 1,1 thousand doctors per year (CGEE, 2016).

All these changes generated direct impact in the Brazilian promotion to research system. Brazil has two main foundation responsible for the promotion of scientific research: the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) and the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES). CNPq's scholarships and Notices are responsible for almost all the support to research, while CAPES concentrates its resources on the field of formation of human resources, leaving to the CNPq only a small share of the master's degree and doctorate scholarships, with the research funding being exclusive to the CNPq (CASTIONI, 2016).

In the CNPq's scope the main support to researchers is the Productivity in Research (PQ) model – one of the 12 models of individual scholarships in the Country. Also called Productivity in Research Scholarship (PQ Scholarship) it is “targeted for researchers that stand out amongst their peers, valorizing their scientific production and formation of human resources, according to normative criteria, established by the CNPq, and specific, by the CNPq's Comitês de Assessoramento (CAs)” (CNPq, 2015, p. 1). PQ scholarship was instituted in 1976 along with the CAs and aim to promote the Brazilian scientists' scientific production. According to information available in the site *Investimentos do CNPq*, PQ Scholarship has circa 15 thousand scholarship holders, whose funding represents the biggest spent in the scope of the line *Research stimulus* (167,8 million reais), which in turn is the CNPq main expenditure model (CNPq, 2018). On the field of Education are benefited 442 scholarship holders in this line, among the 15 thousand the CNPq reports having on its database.

## **What is being supported in terms of research in Education:** the practices of the European Higher Education Area

CNPq uses a research stimulation system much different from the patterns existent in the Northern countries. In the European Higher Education Area (EEES), for example, where are the 28 countries that compromise the European Union (UE), the Directorate-General for Investigation and Innovation, recently updated the actions of research promotion and instituted the *Programa Horizon 2020* (H2020), a powerful program that will inject 80 billions euros for the financing of research in universities and research centers. Unlike Brazil, in the European Union and member states's programs, there are no projects aimed individually for researchers. The projects are destined for meeting official

announcements, and in the case of the European Union, promote a competition among different research groups to dispute the available resources.

It is very important an additional clarification when it is analyzed the Brazilian reality compared to the EEES. The Bologna process, as it is known the common space for higher formation, in its diverse cycles and phases, is maybe the most well known process that affects the European universities (ANTUNES, 2005). It first came to be from an agreement between deans, in 1988, and later, in 1998, in the Sorbonne University, between the governments, to organize a similar structure of university degrees. However, it is not exactly an European Union's program. Although it has caused much controversy in the moment of its introduction, several countries built their legislations from it, but the EU indicated only a few orientations. There are still many problems to overcome as the ones pointed by Araújo, Silva and Durães (2018), in which in a recent meeting at Paris, where the Bologna process' 30 years were commemorated, has livened up an agenda increasingly more common between the member states (EHEA MINISTERIAL CONFERENCE, 2018).

Currently EU finances the universities through the Erasmus+ (related to learning) and H2020 programs (research). *The European Research Council* (ERC), or Conselho Europeu de Pesquisa, provides scholarships for researcher, who can then choose in which university they may perform. The H2020 caused two types of controversy. On one hand, the main investigator of most supported projects perform from universities in Germany, or the United Kingdom or in neighboring countries. Researchers from other countries have little capacity to launch individual projects, depending of association with researchers from German and British universities. On the other hand, most resources are destined to areas that can yield patents. Although Social and Human Sciences are necessary for many aspects of the H2020 strategy, they also receive smaller shares of the budget. However, the H2020 has stirred other actions, such as in Germany – that implanted its own strategy in which it aims to create university clusters – and in France – where many universities also merged, to reach better competitively in the disputes for European projects.

Essentially, this strategy reveals that the universities are acting in a more integrated manner due to strategic projects. It can't be observed initiatives to reward individual researchers only due to their relative productivity, measured in papers and quotations, although it can be an important indicator for the project leader, it is not for the sanction the condition of simply receiving a reward prize, such as the productivity in research scholarship in Brazil.

## **Methodological aspects employed**

From these informations and admitting that the merit reached by the body of scholarship holders that are part of the Education CA is representative of the quality of what is produced, it was aimed to know what type of researchers are supported by the CNPq in the scope of the Education CA and in which measure the projects supported are connected to Brazilian education's problems, specially Basic Education, emphasized by the PNPG. For this purpose, the present investigation used surveys previously done and presented by Castioni (2016) for the area of education, where the grant of the PQ Scholarship revealed that 1) there is a concentration of researchers on the axis South-

southeast, corresponding to 85% of the total of scholarships; 2) the scholarship distribution valorizes bibliometric production; 3) there is a lack of criteria that valorizes regions with lower educational indicators; 4) there is a low renovation in the scholarship holders' pool, revealing permanency criteria that doesn't match with academic production; and 5) there are difficulties for the researchers that ascended to the scholarship's highest degrees, despite relevant production.

Facing the results reached by Castioni (2016) and from the statistic data collected, it was made an analysis of part of the post graduation financing policy, aiming to relate it to Basic Education. This analysis used as classification basis the PQ scholarship holders in the area of Education' project titles and the scientific production in this same area, being developed in three main steps:

- i) Data collection: the data was collected from the site *Investimentos do CNPq em C&T3* – in which were identified the researcher's data, project title, university bound and scholarship period – and the *Lattes Platform*, aiming to complement the information extracted the researcher/institution's geographic data, number of publications and orientations;
- ii) Project categorization: step responsible for classifying the Project, through title analysis, among five set categories (table 1): Conceptual Development, Basic Education, Teaching (formation, pedagogic practices), Higher Education, Public Policies and Teaching Methodology
- iii) Analysis of results: responsible for identify correlations of the analyzed data according to the subject proposed by the paper.

**Roster 1 – Conceptual detail of employed categories**

Category	Definition
Conceptual Development	Projects that show a greater conceptual deepening over a certain subject, proportionate the development of research projects' analytic categories, or deepen thoughts or concepts developed by seminal authors in an area of knowledge. Usually the project's theme pursues the investigator through his professional career
Basic Education	Projects whose study subject involves some aspect that belongs to Basic Education's scope (stages and modalities)
Teaching (formation, pedagogic practices)	Projects whose main theme was the teacher figure, that touched more than one education stage or transversal themes
Higher Education	Projects whose study subject involves some aspect treated on the Higher Education Scope (undergraduation and graduation)
Public Policies	Projects whose utterances touched more than one educational stage or transversal themes (gender, race, human rights, etc.) and that deal with aspects related to public policies or teaching methods
Teaching Methodology	

Source: personal elaboration.

**3-** Allows the consult to scholarship and assistances' payments made by the CNPq, available in <<http://fomentonacional.cnpq.br/dmfomento/home/fmthome.jsp?>>>.

It is worth mentioning that the analysis here presented is an effort to systematize the information available in the CNPq's page about the grant of Productivity in Research scholarship to the area of Education's researchers. It is an initial effort, since the extraction of data from database has a complexity that demands a greater deepening.

On this regard, trying to minimize possible analysis biases and aiming to perfect the classification criteria, it was resorted to the reading of the projects' descriptions of each researcher in the Curriculum Lattes, published on the CNPq's Lattes Platform. Because the limitation of information is susceptible to questioning – since the project's entire contents are not known, only the name and a few words of reference – incurs the possibility of not exactly reproducing what is the project's subject. However, we deemed important the effort to relate what the CNPq supports in terms of research projects and relate them with the possible challenges of Brazilian education. In this sense, it will be presented three different results of the analysis: parallel between the PQ Scholarships (CNPq) and the Programs evaluated by CAPES; analysis of the PQ scholarship holders' scientific production on the Lattes Platform; and the CNPq' categorization of the research projects on the area of Education related to the PQ scholarships.

## **Main results obtained**

Before we start to analyze the data collected about the parallel between the PQ Scholarships and the Programs evaluated by CAPES, it is important to clarify that there is a small divergence between the number of scholarships informed in CNPq's Portal and the number of PQ we built for this analysis. This is related to the period of ascertainment of the quantitative, since the period is December 2017 and in the case of the scholarships the period refers to the year 2018, when it came into force the supported projects and the scholarship's implementation. The data show 86% of those that receive PQ are located on the regions Southeast (56%) and South (30%) (table 1). According to data available on Sucupira Platform, CAPES' Four-Year Evaluation evaluated 244 courses in 170 programs, showing a concentration 20% smaller than what is seen on the PQ Scholarships, in other words, these two regions were responsible for 65% of the programs, being 41% Southeast and 24% South (table 1). If we aggregate the courses with grades from 4 to 7, for example, in which the most well evaluated programs concentrate, the participation of these two regions falls to 52% of the total.

The incontestable fact is that the regions South-Southeast's participations is at least exaggerated by the CNPq's CA Education. In the last years, due to the REUNI's expansion, other regions created masters and doctorate courses, which relatively reduced the regions South-Southeast's participation. Facing of this scenery, we hope that a national criteria can be reasonable to contemplate more regions than the traditional center-south.

**Table 1 – CAPES Programs and PQ Scholarships: participation by geographic region**

Regions	CAPES		PQ (CNPq)	
	Programs	Participation	Quantity	Participation
Center-West	16	9%	16	4%
Northeast	32	19%	34	8%
North	11	6%	8	2%
Southeast	70	41%	242	56%
South	41	24%	129	30%
<b>Grand Total</b>	<b>170</b>	<b>100%</b>	<b>429</b>	<b>100%</b>

Source: personal elaboration from CAPES Evaluation (CAPES, 2017b) and CNPq's PQ (2018).

Regarding the analysis of the PQ scholarship holders' scientific production on Lattes databases (table 2), the aforementioned data was obtained by extracting information from Lattes Platform of each PQ scholarship holder in the last two years, considering as a criteria the data registered on Lattes Platform and consulted in February and March 2017. Although the growth of regions' North, Northeast and Center-West's programs may have been meaningful over the last years, we still can't outweigh the number of titulars. It is demonstrated below the importance that the Center-South regions have on the formation of masters and doctors. Since the number of orientations is a potential indicator that a great part of the thesis and dissertations will also have as products papers or books' chapters, we can observe that the regions that stand out the most are exactly were is the supply of the greater number of programs, but it can be foreseen that the consolidation of programs in other regions of the country will change the South and Southeast relation against the other regions and that a criteria to valorize the production of the emerging consolidation of post graduation in other regions of Brazil must be adopted.

**Table 2 – Total of publications and orientations of the PQ scholarship holders by specific region**

Regions	Total of publications in the last 2 years		Total of orientations in progress	
	Articles in Journals	Books and Chapters	Doctorate	Mester's degree
Center-West	74	89	40	18
Northeast	221	210	69	53
North	49	71	21	12
Southeast	1.364	1.209	404	318
South	955	705	278	182
<b>Grand Total</b>	<b>2.663</b>	<b>2.284</b>	<b>812</b>	<b>583</b>

Source: personal elaboration from the Lattes Platform's database (CAPES, 2017b).

The last item analyzed aimed to categorized the researcher projects on the area of CNPq's Education relating them with the PQ Scholarships. This stage of the work had as objective to offer an overview of the projects supported by CNPq. Considering that an important source of the agency's resources is destined to the promotion of an expressive contingent of researchers (15 thousand) that act in the formation of future researchers, it would be interesting to know what this effort has provoked. On this sense, table 3 shows the research projects grouped along six thematic categories (Roster 1), aiming to offer greater visibility to the analysis and to the relation with the great challenges of Brazilian education, that usually can be characteristic of the problems faced by the projects supported by CNPq. The classification below is far from being ideal. It is an initial effort to produce a metric that possibilities the relationship of the supported projects with the challenges of Brazilian education.

**Table 3** – Categorization of the PQ scholarship's research projects for geographic region

CATEGORIE	Total	%	Southeast		South		Northeast		Center-West		North		Grand Total
			Total	%	Total	%	Total	%	Total	%	Total	%	
Conceptual development	128	30%	70	29%	44	34%	7	21%	4	25%	3	38%	127
Basic Education	109	25%	67	28%	29	22%	8	24%	4	25%	1	13%	85
Teacher (formation, teaching practices)	77	18%	43	18%	23	18%	7	21%	3	19%	1	13%	77
Higher Education	44	10%	17	7%	16	12%	6	18%	3	19%	2	25%	43
Public Policies	41	10%	26	11%	10	8%	3	9%	1	6%	1	13%	41
Teaching Methodology	30	7%	19	8%	7	5%	3	9%	1	6%	-	0%	28
<b>Grand Total</b>	<b>429</b>	<b>100%</b>	<b>242</b>	<b>56%</b>	<b>129</b>	<b>30%</b>	<b>34</b>	<b>8%</b>	<b>16</b>	<b>4%</b>	<b>8</b>	<b>2%</b>	<b>429</b>

Source: personal elaboration from the CNPq's PQ (2018).

It was considered as initial premise the fact that the CNPq's PQ scholarship holders, from the Education CA, are a sample of what is reference for the educational area, aiming then to know what it really rewarded on the area of Education. On this direction, the category with the largest perceptual of PQ Scholarships is denominated *Conceptual Development* – responsible for 30% of total participation – encompassing a very characteristic aspect of the educational field, that consists on the development of a research subject that pursues the researcher over his professional trajectory, being divided on subcategories, such as: history of education; teaching thought; analysis with focus on documents (scientific production, speeches, letters, mediatic papers); gender, race, sexuality and social inequalities; among others. In good measure they are objects that are related to the PQ scholarship holder's master's or doctorate's line of research. Not necessarily the grouped themes on this item are unconnected from the problems or

realities of the area of Education, however, they reveal a certain movement from what is presented to the current reality.

It may be observe that the category classified as *Basic Education* is the one that has the 2nd largest participation on the fixed scale, with 25% of participation. The main themes of PQ Scholarships classified as *Basic Education* research about: questions related to the teachers (formation, teaching practices); Conceptual Development; Teaching Methodology; Professional Education; Children (literacy, political questions, teaching practices, methodologies); Evaluation (learning, education, institutional); EJA (Education of Teenagers and Adults); Public Policies; Education History; Technology applied to education; Gender, Race, Sexuality and Social Inequalities; International (comparative study, case study); Indigenous Education; Analysis (scientific production, speeches, letters, midiatic papers); Rural Education; and Special Education.

The category *Teacher (formation, teaching practices)* obtained the 3rd largest participation on the fixed scale, with 18% of participation, being above others that generally are held as more prestigious, such as *Higher Education* (10% of participation). As mentioned, the category *Higher Education* accounted for 10% of the analyzed scholarships, having as main study topic: the *Teacher (formation, teaching practices)*; the context *International (Comparative, case study)*; the use of *Technology applied to education; the question of Gender, Race, Sexuality and Social Inequalities*; and the *Evaluation (learning, education, institutional)*.

The Regions' internal distribution follows the same pattern, even on regions with low coverage of the CNPq's PQ Scholarship, in other hands, the category Conceptual Development is the one that concentrates the largest number of indications, followed by Basic Education. Only on the Northeast Region Basic Education presented a greater number of PQ Scholarships in comparison with the other categories, being responsible for 24% (8 scholarships) of the total of 34 scholarships granted to the Northeast.

On the scope of the *Basic Education* category, subject of this work's main interest, it also was done the institutional study, with the 44 institutions divided the 109 PQ Scholarships made available for this category (table 4). The institution with the largest number of scholarships was UFMG, answering for 8% (9 scholarships) and consist of: Teaching Methodology; Professional Education; Education History; EJA (Education of Teenagers and Adults); Teacher (formation, teaching practices); and Children (learning, political questions, teaching practices, methodologies).

**Table 4 – Category Basic Education: institucional study of the most representative institutions**

Institution	PQ Scholarships	
	Total	%
UFMG	9	8%
UFSC	7	6%
UFRGS, UFF, UNICAMP and USP	6	6%
UNIFESP, UFU and UFRJ	4	4%
PUC/RIO, UERJ, UFPR, PUC/SP and UFPEL	3	3%

Source: personal elaboration from the CNPq's PQ (2018).

Maybe a most ample analysis, summing the PQ and the Universal Notice's projects, may offer us a better view of what we affirm above, however, the difficulties of obtaining data from the Universal Notice, due to the amplitude it has in terms of values, make this task of greater complexity than the one performed here with only the PQ. The data pointed by the current classification do not differ much of the one found by Silva and Jacomini (2017), while making an analysis from the Planos Nacionais de Pós-Graduação (PNPG), in particular, of the one in effect on the period 2011-2020. The worked conducted by the authors from the Thesis and Dissertations' Database, had as sample programs with grade 5 on CAPES' evaluation and identified that the greater part of the programs is on the south-southeast axis e among the most studied subjects were found some similarities with the ones made on this endeavor from the CNPq's database. As results, Silva and Jacomini (2017), identified that  $\frac{1}{4}$  of the total of analyzed thesis (432) and  $\frac{1}{3}$  of the dissertations (851) referred to themes that we denominated conceptual on the field of basic education. Works focused on themes such as quality of education/teaching are minority among the categories built by the authors.

## **Closing remarks**

This work presented an initial effort in systematize information that are very hard to see on CNPq's page. Despite the difficulties to access the data and working with the information currently made available by CNPq, it was possible to identify some results that clarify to which research projects' categories the PQ scholarships on the area of Education are being directed and its relation with the educational context in Brazil.

Among the results, stands out a concentration of researchers that receive PQ Scholarships, and also the PQ scholarship holders' scientific production, in the regions Southeast and South, maybe because they have a greater offer of programs. To minimize this concentration, it is suggested that the adoption of some regional criteria maybe would be more reasonable to contemplate emerging regions on the offer of post graduation courses and where the educational indicators are still in disadvantage. Contrary to the other CNPQ's notices, supported by the Sectorial Funds, the CAs don't apply the PQ scholarships the reserve of 30% of the resources foreseen for projects originated from the North-Northeast and Center-West regions.

Regarding the initial attempt to categorize the CNPQ's research projects on the on the area of Education relating to the PQ Scholarships, it was observed a great valorization to the themes that give continuity to the conceptual aspects of the researchers' dissertations and thesis and the orientations they conduct, what can proportionate a certain displacement from the problems or the reality of Brazilian education. On the context of Basic Education, there was a greater thematic coverage approaching several subject that go from the teaching to international comparatives.

Based on the results, it can be presumed that there is an attempt to equalize the thematic with the currently problems of Brazilian education. This may be result of the last CNPq's Official Announcements, that seem to signal a change on the financing's orientation, for example the Official Announcement for the area of Human Sciences and Applied Social Sciences – Notice CNPq N° 22/2016 – Research and Innovation in

Human Sciences, Social Sciences and Applied Social Sciences –, that had its focus turned directly to the confrontation of Basic Education's problems, such as the transition between elementary school and high school.

Official Announcements of this nature may be inaugurating a new pattern on the stimulation to research on the scope of Brazilian university on the area of education, however, the results of such initiatives need to be more oriented to problems or to evidences, which is a tendency in the financing of research in several Announcements such as the *Programa Horizon 2020*. The CNPq also makes specific notices for the researchers supported by Sectorial Funds. The recent preoccupation with specific themes, such as the transition between the final years of elementary school and high school, seems to inaugurate a new stage.

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