

Domains of action of researchers in Education in Brazil*

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Abstract

This article outlines areas of action of researchers as tools to interpret for whom the area of Education produces knowledge. It contextualizes the research in Education in Brazil in its peculiar institutional and epistemological conditions. It works with sociological concepts such as scientific field, scientific capitals, and autonomy of the professional field to illuminate aspects of the Brazilian academic context of knowledge production in Education. It associates these concepts with the notions of domain and dialogue with audiences to advance in the interpretation of the contradictions and heteronomies faced by the area. It is grounded on the qualitative analysis of semi-structured interviews with Brazilian researchers recognized for their academic representativeness with productivity grants and a history of leadership in scientific research. It questions how relationships with different social groups support processes of knowledge production and circulation. To account for this questioning, it characterizes the academic-scientific subfield of Education in terms of specific capitals, research audiences, prestige criteria, and political relations. It discusses strategies of dialogue as instrumental categories to interpret phenomena associated with scientific and political legitimacy. As a result, it finds four domains of action in knowledge production in Education: scientific-disciplinary; pedagogical; political-managerial; dialogical socio-educational. It concludes that, when acting in the different domains, these researchers differently order the priorities conferred to scientific rigor and socio-educational intervention.

Keywords

Educational research – Knowledge production – Domains of action – Scientific field.

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Introduction⁴

In the transition between the decades of 2010 and 2020, educational research in Brazil is marked by a series of tensions. Among them, it is important to highlight the demand for democratization of knowledge, from its production to its social uses. This demand is associated with movements of expansion and democratization of access to university, where educational knowledge is systematized, with an overlap of interests and codes that are often divergent. At the same time, conflicts around the legitimacy of scientific knowledge occur in the social dispute over public policies. Academia's proposals for educational practice, based on scientific research, find limited appropriation in the educational field. In terms of structures, platforms for integration between the knowledge produced by the national research system – science, technology, and innovation – and the formulation of public policies have historically been missing, especially in the area of Education. This type of conduct contributes to the distancing between contexts of knowledge production and application, leading educational policy analysts to qualify the attempted approximations between graduate and basic education, essayed from 2008 on, as “late and insufficient” (RISTOFF; BIANCHETTI, 2012). Even though programs in this sense have been implemented, their actions have been reduced and extinguished since 2015, a political movement guided by the principle of austerity crystallized in the *Constitutional Amendment* n. 95/2016 (ROSSI *et al.*, 2019).

Given the interrogations that intensified with the escalation of conflicts in the country's politics, we sought to understand strategies employed by researchers in the area of Education to produce knowledge in the dialogue with referential audiences.

In this article, we propose that this understanding can be aided by the analytical construct domain of action. We built this resource from the qualitative analysis of semi-structured interviews with prestigious researchers in the area of Education in Brazil. We approach their statements on their research practices, seeking to understand which relationships with different social groups – or audiences – support their processes of production, circulation, and application of knowledge. Our discussion considers elements that characterize Education as an area of knowledge, analyzed with theoretical categories such as scientific field, specific capitals, and research audiences. By articulating them to the notions of domain and prestige associated with political dispute, we find manners by which researchers in Education decide on educational research. From these types of position-taking, we unfolded four domains of action in knowledge production: scientific-disciplinary; pedagogical; political-managerial; dialogical socio-educational.

Knowledge production in Brazil is fundamentally associated with postgraduate programs and takes place in the academic-scientific field formed by some isolated research institutes and higher education institutions, mostly at public universities. This field is broadly regulated by two institutions: the Coordination for the Improvement of Higher Education Personnel (Capes) and the National Council for Scientific and Technological Development (CNPq). CNPq funds scientific research, supporting individual projects,

4- The dataset that supports the results of this study is not publicly available, due to ethical procedures for protecting the participants. Data access can be requested from the authors directly to their contact emails.

organized in areas according to an epistemological framework known as its “tree of knowledge”. Capes evaluates and funds postgraduate programs classified in areas mostly aligned with the CNPq definitions. For both institutions, the area of knowledge “Education” belongs to the large area “Human Sciences”. It is an area of multi- and interdisciplinary features, as a kind of “interdiscipline”⁵.

In general, Education is considered a soft (“non-paradigmatic”) and applied discipline, a “social and creative profession” (CHYNOWET, 2009; BIGLAN, 1973). In Brazil, it is scarcely bounded as an area of knowledge, going beyond pedagogical and didactic subjects, and including research related to the Arts and Humanities and other applied sciences.

Knowledge production in Education at the postgraduate level is not aligned with the training in undergraduate programs, which have a professional orientation. Education professionals are trained in bachelor of education programs, such as Pedagogy, which enables teaching in early childhood, primary and youth and adult education. However, pedagogy itself, or teaching knowledge, has no centrality at the post-graduate level.

Public policies that evaluate research for funding do not directly target knowledge production in terms of content (theme and approach) or audience and use, but only in terms of publication formats. In doing so, they adopt a more open understanding of what the area of knowledge is than the ones practiced in other contexts. In this regard, *Area Document*⁶ issued in 2019 states:

The area of Education in postgraduate education lodges courses, programs, and research that focus on broad aspects of human formative processes, from their conceptions and foundations, epistemological bases, organizational structures, and policies for school and non-school education, quality conditions, experiences, and practices, dimensions and diversity, interfaces with other areas, etc.

Nevertheless, it signals the need to interact with basic formal education, considering the precariousness of the Brazilian public school and the need for academic-scientific knowledge production in education to strive to overcome its problems:

[...] research in the Area must be more associated with the reality and the solution of problems of school life and formative processes (CAPES, 2019, p. 11).

The social insertion of postgraduate programs in the Area of Education is a huge challenge considering the magnitude of social problems in Brazil and the low quality of public basic education. (CAPES, 2019, p. 15).

5- An area of knowledge, or basic area, is defined as a set of interrelated knowledge, collectively constructed, and gathered according to the nature of the research object with purposes of teaching, research, and practical applications. A large area, in turn, is an agglomeration of several areas of knowledge, guided by the affinity of their objects, cognitive methods, and instrumental resources reflecting specific sociopolitical contexts.

6- We refer the Area Document nº 38 (CAPES, 2019), Education, situated at the College of Humanities, in the Great Area of Humanities. We recognize, however, that educational themes are present in other parts of the Capes System, such as the Area of Teaching, number 46, isolated from Education. There are also topics of Education in the Area of Interdisciplinary Programs, 45. The Areas of Teaching and Interdisciplinary Programs are framed within the College of Exact, Technological, and Multidisciplinary Sciences’ Large Area of Multidisciplinary Programs.

The 2019 *Area Document* presents an inflection concerning previous documents, which focused their concern on establishing rules to arbitrate disputes in the academic-scientific field to structure and qualify its expansion. Now, the discussion moves toward urging the construction of institutional channels that favor the social use of scientific knowledge. Therefore, we sought to visualize what the reference researchers in the area built in this sense.

The notion of domains of action from sociology of education

To characterize the knowledge production in Education in Brazil, we take as references the Bourdieusian concepts of scientific field, political and pure scientific capitals, and autonomy of the professional field (BOURDIEU, 1976, 1996, 2004). We understand that, differing from Bourdieu's France, in Brazil, it is necessary to consider an academic-scientific field, since neither the university field nor the scientific field exist in a distinctly and independently. Knowledge production is made possible by public funding based on a research evaluation scheme that employs criteria based both on human resource building and output validation in the scientific market.

In Brazil, educational research is carried out in the segment of the academic-scientific field linked to the area of knowledge of Education, composing a kind of subfield with peculiar characteristics. The ability to promote intervention in the application sector is a criterion of legitimacy for the validation of scientific activity. In the case of Education, social relations around the educational phenomenon suffer intense political dispute. This fact, together with the fragile disciplinary delimitation of educational research, leads actors in the field to turn to non-academic audiences to reinforce their position. Although the relationship with non-academic (non-specialist) audiences is present as a validating criterion in other academic-scientific subfields, this is a pivotal feature in Education, giving rise to a specific epistemological culture (CHARLOT, 2006; CAREGNATO; MAGGI, 2009). These traits, common to other disciplines in the Social Sciences and Humanities, condition the varying degrees of objectivity with which researchers can work, being parts of the totality under inquiry. The research objects constructed by researchers also affect them, given their ethical, political, and historical implications (BARATA *et al.*, 2014).

This entails not only epistemological but also institutional implications. These characteristics imbue the area with low relative autonomy in the scientific field. Its heteronomy implies a less regulated competition, in which agents bring non-scientific forces forward to intervene in scientific struggles. Such condition is also reinforced by the fact that the area of knowledge of Education is dedicated to a semi-profession (ETZIONI, 1969; FERNÁNDEZ ENGUITA, 1991), i.e., an occupation that mobilizes non-hermetic, scarcely socially valued ("sacralized") knowledge, and whose low-paying work is subject to the authority of bureaucratic organizations to take place.

We consider it essential to understand the category that can be named auditorium, audience, or public and that designates "[...] the set of people that the argumentator intends to influence with their argument [...]" (SANTOS, 1989, p. 99). In the case of the

Education researcher, this ability is measured by the practical impact on an audience that is often non-academic. Educational researchers' objects, and often their audiences, are constructed within schools and in the non-school educational community, which make up a non-academic educational field.

Their dialogue with this audience depends on the ability to use more open codes than those typical of the scientific field. At the same time, the accumulation of pure scientific capital, to remain in the academic-scientific field, requires the ability to communicate in traditional, hermetic scientific terms. Knowledge production can be stressed by the need to meet both the criteria of the academic-scientific field and those of the non-academic, educational field of practice. This is associated with ambiguities in the social position of the university professor-researcher, between the academic-scientific field, which has some degree of rigor and prestige, and the educational field, widely devalued in Brazilian society.

In the 2000s, the area of Education was already characterized by the presence of several discourses that did not necessarily strengthen the internal consistency and external legitimacy of this academic-scientific subfield (CHARLOT, 2006). It faces an antinomy: to assert itself as a socially legitimate activity, it needs to negotiate with other people's priorities, which contribute both to affirming and questioning its uniqueness and its scientificity. In addition to the criteria of validity of the academic-scientific field, it reacts to demands that emerge from socio-educational problems and educational policy and management agendas. Therefore, understanding knowledge production in Education involves understanding the negotiations that go through the research process and who uses the outputs of this activity.

We propose to understand this conflicting space by resorting to the notion of domain (BRENNAN *et al.*, 2016). This notion interprets academic activity based on the relationships that underpin it: intrasectoral, woven mainly between actors inserted in an academic environment; or intersectoral, linking the academic actors to others, outside higher education institutions. In the intersectoral domain of academic production, other sources of prestige accumulated in the construction of an academic career gain importance (BÜHLMANN *et al.*, 2017). The agendas of the areas of knowledge can be seen as networkings of individuals with particular concerns rising from their positions in the field.

In Latin America, there is a tendency for intellectuals in the Social Sciences and Humanities to engage in political disputes and connect their theoretical efforts to social struggle (BEIGEL, 2013). In search of social justice and/or career-building, "[...] individuals establish the legitimacy of their positions not from the academic-scientific field, but political and ideological reasons [...]" (FARIA FILHO, 2016, p. 188).

The notion of domains of action considers that individuals accumulate capitals of various natures and, from the academic-scientific subfield of Education, establish communication with different fields, subfields, areas, and sectors. There is an intrasectoral relationship, in which researchers address the academic-scientific field itself. But the researchers also communicate with other audiences, whose action takes place in the professional-pedagogical and political-institutional spheres. They also establish relationships with actors from a set of social dynamics that do not necessarily constitute fields.

The domains approach allows recognizing the spaces prioritized by researchers to accumulate capital that allows them to compete for the academic-scientific field's resources, either symbolic, such as epistemic authority, or material, such as research funding. In each domain, knowledge is produced with specific emphases, with their respective characteristics and objectives related to their audiences.

Methodology

This article originates from a research project initiated in 2010⁷, supported by CNPq, whose main objective was to characterize researchers of excellence's collaboration networks in the area of Education. We took as reference individuals who received a CNPq 1A level productivity grant and led at least 10-year-old research groups registered with CNPq. We found nine researchers. The study was deepened in 2015 and, at that time, the composition of the reference group had changed, reaching 21 people who met the criteria.

We analyzed the individuals' performance in knowledge production over ten years. We collected bibliometric data from the researchers' curricula, producing graphs that detailed their co-authorship networks. At the same time, we analyzed evidence of scientific-political capital and social capital through activity in leadership and advisory positions in higher education institutions, funding and evaluation agencies, and other organizations in the public sector. We also identified evidence of their participation in non-academic circles and their processes of international circulation.

We conducted individual interviews with an intentional sample of ten individuals. The interviews sought to clarify how researchers work in networks and produce meanings about their activity. The interview script began with the presentation of the graphs that synthesized their production in the analyzed period and inquired about networks, evaluation, and knowledge production.

The content of the interviews was interpreted through successive readings that related the interviewees' statements to quantitative data obtained from the curricula, explored in a previous article (CAREGNATO; SFREDO MIORANDO; LEITE, 2018). When addressing research strategies, we detected differentiated profiles in terms of motivations for scientific production, responses to incentives, thematic choices, and communication patterns. From the coding of contents into the initial categories, we found specific meanings for knowledge production in Education.

We consider that the results found through these techniques of data production and analysis are reliable for the social segment in question: elite researchers in the area of Education who founded the subfield in Brazil. Although these results may diffract into

7- The research project "Evaluation and collaboration networks: innovation and changes in the knowledge webs", coordinated by Denise Leite and carried out between 2011-2015 (PROCESS 302440/2010-0), succeeded by the project "Evaluation and collaborative networks II: scientific production in Education and international control of science", executed between 2015-2020 (PROCESS 471818/2014-3). Research projects coordinated by Célia Elizabete Caregnato were associated with the aforementioned ones, also with funding from CNPq: "Academic-scientific knowledge in collaborative networks: macro and micro-social aspects", carried out between 2012-2014 (PROCESS 401475/2011-5), and "Academic-scientific knowledge in collaborative networks II: knowledge production, affinities, and habitus in the field of Education", carried out between 2014-2020 (process 471585/2014-9).

different patterns in the new generations that access the status of excellence researcher, they are important because they portray the fundamental historical layer over which the others are based, constituting a kind of reference about what it is like to be a researcher in Education in Brazil.

Domains of action in the movement between fields, capitals, and audiences

The initial phase of interpretation of data collected from the researchers' curricula found evidence of their trajectory as artificers of the subfield. This conclusion was constructed based on prestige markers that indicate peer recognition in the academic-scientific field, considering leadership positions in research, scholarly outputs, international reputation, arbitration of scientific publishing, performance in consultancies, administration and management positions in higher education institutions, and scientific associations, participation in directive councils of state agencies.

In other studies, we have exposed processes of change that occur in the field for the legitimation of individuals as reference researchers (CAREGNATO; SFREDO MIORANDO; LEITE, 2018). These results were explored considering that, historically, traditional researchers produce for a national audience. The curriculum analysis of more recent generations of researchers shows a change in production patterns influenced by evaluation, aligned with parameters of international science, which also involves a greater resort to networked co-authorship, which builds up in recent years.

However, across generations, it is possible to detect evidence of knowledge production patterns oriented to the accumulation of capitals of different types, according to Bourdieu's (1996, 2004) analytical proposal. Pure scientific capital is linked to research projects in which the relationship with extra-academic sectors is limited to data collection and, occasionally, to turning over results.

Research in Education responds to the stimuli of public and institutional policies, which also condition what, how, and to whom researchers can speak. The interviewed researchers report that public induction: (i) was the root of postgraduate studies in Brazil; (ii) reconfigures search schedules; (iii) presents a historically differentiated structure for Education; and (iv) can block research activities that structure communication with audiences.

[...] educational research itself, in the way it has developed in the last, say, 40 years, is related to postgraduate education. [...] If you take the first productions [...], they have a very clear profile, which is the profile of quantitative research aimed at offering state secretaries municipal secretaries subsidies to governmental policies in force in the period. (Researcher 3).

We worked with fields of confluence. Due to Capes's pressure, we took up research lines, although a field of confluence is broader than a research line. A field of confluence means that socially, we do not perform research isolated from other colleagues, from other problems. (Researcher 5). I think the scholarship CNPq grants for undergraduate students, the scientific apprenticeship scholarship, is one of the most important things that CNPq has done. [It is] Fundamental. In other

areas, in the Exact and Health Sciences, they are much older and much more influential. We took a long time to get in, we got this kind of scholarship in the mid-'80s. (Researcher 7).

The [state funding agency] created this line and [...] we were called by one of the schools because they wanted advice. [...] On the one hand, there was a lot of questioning from [the state development agency] itself if what we were doing was research and not extension. [...] But then the Department of Education shunned our work because we were starting to get strongly into neoliberal policies, which even terminated these schools, which were references for training in the state [suppressed]. So it did not go ahead as a policy, on the contrary, we received many attacks. We received attacks from the academy because we were not doing research, and the school system, because our work was political interference in the system. (Researcher 6).

According to the participants of this study, their audiences are manifold. Researchers produce knowledge aimed toward primary school teachers, teacher training in undergraduate degrees, and broader audiences outside strict academic canons. In doing so, they work with articles for national and international scientific journals, but also with pieces for newspapers and magazines, bulletins, and consider that their direct communications with audiences are also outputs, without the mediation of the written text: lectures, workshops, seminars, training actions. These audiences are seen mainly around the school, but also in government agencies in different administrative spheres, non-governmental organizations, trade unions, social movements, and other civil society organizations. These extra-academic interactions are highlighted by the researchers.

My production with my advisees goes on full-throttle because they are all teachers at higher education institutions, and they also need this publication. [...] And I also see everything I have worked on put into practice because most of my advisees are institutional managers of Brazilian universities. (Researcher 10).

Research must have a necessary bond, in the strong sense. [...] Research has to help us look at reality, but to change it. And when does it change? It changes through bonding. But this bond may be your classroom, it may be an extension project, in the [social] movement. However, in our case, I think [it is in the] the movements, various social movements of cultural, social, and economic orders. They make a difference and make us less arrogant. Reality makes us less arrogant. (Researcher 8).

When I started working with social movements back in the 1980s, which was during my master's and doctoral training, I already had a partnership with [NGO's name suppressed], in support of movements fighting for schooling. I also recommended alumni and apprentices of mine to work on [behalf of suppressed NGO] as their first jobs. [...] So, there was always this interaction in which the research was based on intervention, but also each one preserving its specificities, without mixing the two dimensions. (Researcher 9).

[...] I collaborate with an NGO that works with continuing education of teachers, [suppressed name], with which I produce many publications [...]. I also collaborate with a magazine of

theirs, [...] focused more on teachers than on a strictly academic production, but it has a huge readership. (Researcher 4).

Although there is an international dialogue, most of the interviewed individuals produce knowledge fundamentally for a national audience, having its basis and tonic in the primary and secondary teachers, in training or service. When considering this relationship, they can: (i) address the professional public more directly; (ii) establish mediations between the school and university circuits, considering their languages; and (iii) consider how to represent issues of practice in public education policy instruments.

You must produce a text [that gives] quick access to those who are doing the thing, who are [involved] in practice. [...] We have two bulletins, we are going for the third, now that the idea is to deal with this audience. (Researcher 2).

These teachers [...] came to study for their master's degrees. Some returned to school teaching, others followed other paths. [...] So we, the teachers, had this strengthening network among us because what we were doing was a new thing and we had many doubts about how to move forward. [...] Part of this movement, in our specific case, is in the text of that book we organized. (Researcher 6).

With Enade, I did three jobs for Inep that I consider quite innovative. [...] So, there we asked the question about first-generation students, about who had influenced them to enter the university, for them to stay in university and how the faculty did it. We performed an analysis, and I know that the MEC is still analyzing that, to show to what extent the democratizing policy was working. (Researcher 10).

Such knowledge production is interested in the immediate use of didactic and pedagogical resources to dynamize the curriculum. The construction of this type of product mobilizes a professional capital related to educational contexts. However, this type of product, focused on contextualized practice, is discouraged by the rules of the academic-scientific field:

I have the bulletin [name omitted], which I deactivated because I was penalizing the group, because it is local and was aimed at being so, to show what was being done. I did not have an editorial board, we defined what we were going to do, so it was penalizing my students. But the idea was exactly [to show] the research in progress and it had an unbelievable success [...], a monthly average of 3,000 accesses. And I stopped production, I do not want to penalize anyone. (Researcher 1).

Thus, if the analysis of the data collected in the first phase of the research allowed us to identify the presence of capital, the combination of the analysis of qualitative data from the interviews led us to view varying tactics and rhetoric in establishing relationships with different audiences. It should be noted that the individuals do not declare, nor

necessarily do they recognize, the domains of action in which they operate. They appear as a retrospective analytical reconstruction, discernible in the analysis of the dataset.

Based on this relationship, considering the contribution of Brennan and collaborators (2016), we elaborated the notion of domain of action as a manner to produce knowledge by taking a strategic position in the scientific field (BOURDIEU, 1976) and dialoguing with different audiences according to epistemological and political objectives, which we understand in the relation between the propositions of Santos (1989) and Charlot (2006). We understand that the elements of scientific activity that characterize an Education researcher’s domain of action involve the occupation of spaces in the academic field and beyond; the relationship with other fields from a position in the scientific field; mobilization of various capitals; the relationship with different classes of actors; and interlocution strategies, with more or less hermetic a language. A domain of action implies a rhetorical style, a repertoire of different ways of relating to the scientific logic of knowledge production to deliver it to different types of audiences. It is important to consider that these domains of action were elaborated based on the experience of Brazilian researchers. Thus, among the detected domains, none of the researchers spares the university space, especially that of postgraduate studies, as a source of legitimacy for the knowledge they produce and propose. The university is also the institutional structure that guarantees access to research funding, which, in turn, is associated with the rules of scientific activity evaluation.

The detected domains refer to the scientific-disciplinary; pedagogical; political-managerial; and dialogical socio-educational segments. We understand that they structure the subfield of Education and the scientific activity in it, and also have internal nuances. For example, the disciplinary domain can be multidisciplinary or interdisciplinary in the intersection of disciplines such as Sociology, Psychology, History, Philosophy, and Economics, which contribute to the subfield of Education.

Table 1 contrasts the four domains of action we mentioned, exploring them from the field perspective and seeking to highlight the types of capital in evidence in each case.

Table 1 - Domains of action of research in education in knowledge production and priority fields of disputes and capitals

Domain of Action	Priority Field for Dispute	Priority Type of Capital
Scientific-disciplinary knowledge production	Scientific-academic	Pure scientific
Pedagogical knowledge production	Educational-pedagogical	Professional
Political-managerial knowledge production	Government and institutional-administrative	Political-scientific and political
Dialogical socio-educational knowledge production	Civil society, along with social movements and political agendas	Political and social

Source: Prepared by the authors.

We consider that acting in the domain of the action of scientific disciplinary knowledge production, researchers adopt a posture characteristic of normal science, according to the most consolidated sciences. This domain of action occurs in the academic space, bounded by the standards of the scientific field. Knowledge production in this domain takes on the predominantly typified form of scientific capital: publication in peer-reviewed journals. Researchers' disputes for prestige in this style follow the rules of the scientific field, shaped by the statutes and regiments of academic institutions. By acting as supervisors and advisors, they work with the idea that scholarly research has the function of producing knowledge and training initiates, ensuring the proper use of the scientific method and the principles of science:

I think the important thing is to conduct research seeking rigor, seeking seriousness, and, above all, within Education programs, we have a responsibility to train researchers, and that is my role within postgraduate education. [...] [This] is another feature of my work: I am against this idea of studying to intervene. I think good research serves as the basis for changes in teaching practice, for national or regional policies. I think it is too dangerous for me to perform research to show that you should teach like this or like that. I do not do that. When I finish a research project, I raise questions, usually, because [that is] what I said: a good research project [is the one] we end with questions. (Researcher 1).

Working in the production of pedagogical knowledge, researchers present themselves as dynamic producers of publications resulting from research practices connected to active participation in teacher training in schools or universities. In contrast to the previous domain, there is here a level of intervention in primary, secondary, and higher teaching, training professionals, and generating pedagogical materials. This domain's boundaries seem to be shaped by an expressive commitment to the professional performance of teachers. Action in this domain can be classified as an agency of the professional field that, mobilizing mainly professional capital, also triggers its very scientific capital from social capital.

We wondered whom we wanted to address. And then we said, "We want to address our students, who are mostly teachers, as they work in education, teaching, and also [other] teachers". [...] Our networks are not only composed of our peers, but they must also get responses from teachers. [...] I have always been working with teachers, as my concern is exactly to show that teachers are not formed by coursework, they are formed in networks. So how are these networks like, how do these networks work? So, I am now working in what I am calling "the teacher's cultural world". (Researcher 2).

The third domain of action is related to the exercise of political capital based on institutional decision-making spaces, including public administration structures that do not make up educational units. Delimited in the political-managerial knowledge production, it enjoys integration into several prestigious spaces in the academic-scientific field through

political-scientific capital. Researchers linked to this domain also work outside that field, mobilizing political capitals in the formulation of institutional, municipal, state, and national policies for the educational sector. Therefore, they have a privileged position to participate in the dispute for the rules of the academic-scientific field, moreover producing effects beyond it, influencing the functioning of education systems.

In my trajectory why could I not finally form a broader, more permanent group? Because I, as well, was, for four years, coordinator of the Area, then I was a member of the National Board of Education for eight years, at a time when the new Law on Guidelines and Bases of National Education had been sanctioned. So, we had to regulate all that. So, I got around a lot. After that, I was at Capes... [...]. So, the area is very plural when you leave the scope of the academy. It is very different in terms of the connections you establish with the mayor, with an NGO, or with a civil association of another nature. (Researcher 3).

The fourth domain of action, in which dialogical socio-educational knowledge is produced, also has a political character and mobilizes diverse capitals from a political intentionality. In general, it is linked to social movements and agendas of the public sphere, to intervene with its audience so as to contribute to interpreting, publicizing, and resolving social problems. Acting in this domain, researchers work in processes of non-formal education and social movements through a social capital network. This may show commitment to activism around social and educational issues, and this domain is the one in which political struggle is most evident as a foundation of knowledge production. In addition, it is underpinned by the proposal to act in a dialogical manner with civil society actors. Here, there is a tension tilting the center of knowledge production from academic performance to the university-society relationship.

Many of these authors have a relationship with social movements, especially identity-based social movements – Indigenous, Black, women, gender – and therefore these articulations and networks do not remain centered on the university, they also have an interlocution with social movements. [...] These are relatively new themes, which do not have a long tradition in educational research, but that students [propose], also because university today is much more plural. The subjects are much more plural; the realities and the problems are much more plural. These issues are emerging and developing in universities. [...] There are research groups at the university that are much more articulated and associated with social movements and education systems. For instance, I myself collaborate with an NGO that works with continuing education of teachers [...], with which I produce many publications. It works with education and human rights, [...] with teachers from different municipal systems, and we even produce material for these people. [...] university begins to realize that it is not the sole producer of knowledge. And that it also has to interact with other actors who also produce knowledge. (Researcher 4).

Beyond the mobilization of different capitals, we understand that the domains of action also highlight characteristics and objectives of research in the way academic and extra-academic audiences are approached, according to Table 2.

Table 2 - Domains of action of researchers in Education according to the dialogue with their audiences

Domain of Action	Research characteristics and objectives for the academic audience	Interlocution with extra-academic audiences
Scientific-disciplinary knowledge production	Theoretical-analytical production, with a higher degree of abstraction, compared to the other domains. It aims at the scientific communication of specialized knowledge resulting from research.	Limited, with argumentation based on disciplinary variables. Scientific language, relatively hermetic and restricted. It follows the style of academic publications.
Pedagogical knowledge production	Academic-pragmatic production. It aims to instruct didactic-pedagogical practice in formal education.	Expanded, with didactic argumentation. Technical-professional language focused on instructional communication and teaching in schools and higher education. Interacts with audiences working in formal education without requiring training in the educational sciences.
Political-managerial knowledge production	Political-pragmatic production. It aims to guide the decision-making and implementation of educational policies.	Expanded, with philosophical and legal argumentation. Political and deliberative language, aimed at actors of various levels of policy and educational management. It interacts with the styles of normative and policy texts, interpreting their meanings for practice by social actors.
Dialogical socio-educational knowledge production	Praxiological production. It aims to produce political-educational action in conjunction with the audiences involved in non-formal education.	Dialogical, with repertoires and categories of the interlocutor. Political-pedagogical language, mobilizing a propositional rhetoric of action related to social movements and agendas. It adopts styles closer to popular education.

Source: Prepared by the authors.

Thus, in the area of knowledge of Education, rhetoric is closely linked to the external audience, the State, and civil society as frequent interlocutors. The education system functions as the locus of interaction, and the realization of educational research and action processes depends on the participation of the stakeholders involved. The researcher needs to pay attention to forms of prestige typical of other sectors or fields (BÜHLMANN *et al.*, 2017). In the domains of action that we connect to knowledge production with pragmatic intentionality, the value assigned to the capacity to intervene presides over knowledge production processes. This is the case in the domains of action related to pedagogical and political-managerial knowledge, as well as in the dialogical socio-educational scope, which has a praxiological nature.

This connection, which may be a criterion of applicability, also embeds the risk of discontinuity. In this regard, one of the interviewees warned about limits on the effects of the research conducted by the area on educational realities:

This dialogue is occasional. [...] The area has not been able to give specific feedback for certain studies that it conducts concerning municipalities, concerning states. [...] For example, my student from [suppressed municipality] did a very interesting study on management and, secretary comes, secretary goes, they are not even knowing that production existed. [...] dialogue with policies is very rarefied. (Researcher 3).

Another researcher notices a difficulty of the very academic context in which educational research is developed to relate to other areas in which the educational phenomenon occurs, such as professional and technological education:

Yesterday's dissertation was about [pedagogical] formation, an issue absolutely despised by the university. I get goosebumps just to talk about it. I keep complaining. I want to grab that, I do not know if I can do it yet. It is about teacher training for professional schools. We do not really care about it. We do not even want to know about it. We do not get over ourselves... [...] We're not seeing a foot ahead of our noses. They (the Federal Institutes of Education, Science, and Technology) are educating a very large and very important youth. (Researcher 7).

Although such perceptions may resonate with general meanings present in the area, they may underlook ongoing experiences at the boundaries of the field, such as that reported by a researcher:

Hence research, teaching, and extension must be articulated. For example, in this research project of mine on federal institutes, there is a group of doctoral students researching PROEJA [the National Program for Integration of Vocational Education and Training into Youth and Adult Education]. At the same time, we set up a specialization course for people who work with adults and youngsters who come from various places. It is a tuition-free course. Once a week, with us, a wonderful team, the whole faculty having PhDs. (Researcher 8).

In the field of scientific knowledge production in a narrower sense, there is greater linguistic delimitation, provided by a greater degree of abstraction in which concrete human problems are not detailed, but systematized into categories. It proposes a dialogue within the academic-scientific field, assuming the interlocutor masters certain codes. In the case of pragmatic domains, there is greater immersion in specific intentionalities, with less possibility or pretension of generalization. There is an option to instruct intervention, solving practical problems. Researchers seek dialogue with audiences that are not necessarily initiated in the codes of the academic-scientific field but perform semi-professional activities (FERNÁNDEZ ENGUIA, 1991). In the socio-educational domain, this dialogical dimension advances onto the epistemological level, since researchers propose to define their references together with the audience. Researchers do not lose their place

of epistemic authority but move towards sharing that authority. In this movement, they are guided by political intentionalities that concern social conflicts as a totality, within the national society, without being restricted to internal disputes in the academic-scientific field (BEIGEL, 2013). This engagement can even be mobilized to construe strategies of scientific struggle (FARIA FILHO, 2016).

Final remarks

Education researchers need to articulate their work in different domains of action to attain prestige in the fields in which they operate, dealing with diverse grammars of worth as they pursue negotiated research agendas. Although this exercise has a pivotal character in the building of researchers' networks and enjoys some tacit recognition in the subfield, it is not explicit in the evaluation rules that arbitrate the distribution of resources in the academic-scientific field.

The subfield of Education presents a peculiarity: the tacit rules of the game confer prestige and transit to researchers with the ability to reverberate their work outside the academic-scientific field. Often, this ability is crucial for them to persevere as researchers, especially when research activities unfold over socio-educational actions. The reference researchers who work in the pragmatic domains of action deal, to varying degrees, with the need to convert social and political capital into pure scientific capital, codifying the realities in which they intervene with categories of analysis, problematizing their activities as academic science and then publishing articles about their action research.

This condition is linked to the epistemological status of the area of Education, whose research is nested into a historical reality in which the empirical context also presents claims to scientific knowledge production (BARATA *et al.*, 2014; BOURDIEU, 1996; CHARLOT, 2006). At the same time, researchers are immersed in an institutional reality shaped according to the parameters of the scientific field. They need to plan the effects of their academic activity according to the criteria of the audiences with whom they interact, on the one hand, and the funding agencies, on the other hand, as both are indispensable for the upkeep of their activities.

However, individuals do not view this planning so explicitly. Their decisions are also the result of unconscious structures incorporated along different life trajectories – especially in terms of training and work in academia – producing varied mediations between consciousness, reality, and action. These divergences are apparent, for instance, in the priorities given to scientific rigor and intervention, which, beyond scientific disciplines (BARATA *et al.*, 2014), vary according to the domain of action.

What interlocutions, after all, structure knowledge production in the area of Education? Education researchers in Brazil seek, fundamentally, to subsidize different audiences in the transformation of the reality of national education. However, the chain linking scientific research and educational change, crossed by broader social relationships, is long, articulated in different and not always evident ways. At many points, the scientific field's criteria deviate from those of transformative educational practice. As a result, researchers negotiate different positions in the field.

In Brazil, given the depth and extent of social problems, the engagement of academic researchers with social issues and activism in the sociopolitical field can represent a large proportion of their professional practice, which is not always recognized as productive by the evaluations that assess their performance in the academic-scientific field. Consequently, the funding of research activities guided by these evaluations tends to underestimate an important part of the work needed to develop research in Education. Interviews with reference researchers showed that, in order to achieve prestigious positions, the researchers counted, in their trajectories, on actions in the pragmatic and praxiological domains. In many cases, these activities were crucial to achieving recognized research results that allowed them to access prominent positions in the field.

As researchers engage with the different domains of action, especially the dialogical socio-educational one, they walk a thin line on the boundaries of scientific knowledge production. This can be seen both as a threat to the academic field and the principles of science and as innovation and recognition that the future of knowledge production in the subfield lies in exploring its undefined boundaries. Carefully considering this issue can inform about the strategies that researchers in Education can design to defend their legitimacy in disputes with other areas of knowledge. From the positions taken by these agents, different directions can be given to the tensions that permeate the social use of the educational sciences.

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