

Mathematics Teachers and Curriculum: Authors or Actors?

Deise Aparecida Peralta^{Da} José Augusto Pacheco^{Db} Wagner Barbosa de Lima Palanch^{Dc}

^a Universidade Estadual Paulista (Unesp), Ilha Solteira, SP, Brasil
 ^b Universidade do Minho (UMinho), Braga, Portugal
 ^c Universidade Cruzeiro do Sul (Unicsul), São Paulo, SP, Brasil

Received for publication 27 Jan. 2021. Accepted after review 16 Apr. 2021 Designated editor: Claudia Lisete Oliveira Groenwald

ABSTRACT.

Background: Among the plurality of themes addressed by curricular studies. the nature of decision-making processes involving education professionals has guided some research agendas. Delineated by one of those agendas, this text starts by asking what the participation of teachers in processes involving curriculum is. Objective: To analyse the rationality underlying the involvement of mathematics teachers in the context of curriculum reforms in Brazil and Portugal, presenting a theoretical basis inspired by Jürgen Habermas and its suitability to discuss teachers' participation as authors or actors of curricula reforms. **Design:** Reconstructive analysis of rationality according to the Habermasian discursive ethics. Settings and participants: The context of a comparative study that surveys documents and interviews with two managers of a curricular reform project in Portugal and Brazil, respectively. Data collection and analysis: Analysis of the rationality that underlies the discourse present in curriculum documents of the countries involved and interviews. Results: Centralising elements of national curriculum policies do not mean by themselves the homogenisation of curricula, the rationality that underlies how projects predict the participation of teachers express an illusory discursive varnish about "teachers actively participating," there are spaces of micropolicies with controlled margin of changes that advocate mathematics teachers as builders of policies, but the mechanisms of external regulation contradict this. Conclusions: Historically, in both countries, the educational systems, even expressing a rhetorical discourse on autonomy and flexibility, have remained hostages to the regulation of centralist global policies.

Keywords: Curriculum; Habermas; Mathematics teachers; Rationalities.

Corresponding author: Deise Aparecida Peralta. Email: deise.peralta@unesp.br

Professores de matemática e currículos: autores ou atores?

RESUMO.

Contexto: Dentre a pluralidade de temáticas abordadas pelos estudos curriculares, a natureza dos processos decisórios que envolvem profissionais da educação tem pautado algumas agendas de pesquisa. Circunscrito em uma dessas agendas, este texto parte do questionamento do que se tem convencionado chamar de participação de professores em processos que envolvem currículo. Objetivo: Analisar a racionalidade subjacente ao envolvimento de professores de matemática em contexto de reformas curriculares no Brasil e em Portugal, apresentando uma base teórica inspirada em Jürgen Habermas e sua adequação para discutir a participação dos professores como autores ou atores de reformas dos currículos. Design: Análise reconstrutiva de racionalidade segundo a ética discursiva habermasiana. Ambiente e participantes: O contexto de um estudo comparativo que levanta documentos e entrevista um gestor de um projeto de reforma curricular em Portugal e um no Brasil. Coleta e análise de dados: Análise da racionalidade que subjaz o discurso presente em documentos curriculares dos países envolvidos e entrevistas. Resultados: Elementos centralizadores de políticas curriculares nacionais não significam só por si a homogeneização dos currículos, a racionalidade que subjaz a forma como os projetos preveem a participação dos professores expressam um verniz discursivo ilusório sobre "professores participando ativamente", há espaços de micropolíticas com margem controlada de alterações que advogam professores de matemática como construtores de políticas, mas os mecanismos de regulação externa contradizem isso. Conclusões: Historicamente, nos dois países, os sistemas educacionais, mesmo expressando um discurso retórico sobre autonomia e flexibilidade, têm se mantido reféns da regulação de políticas globais centralistas.

Palavras-chave: Currículo; Habermas; Professores de matemática; Racionalidades.

INTRODUCTION

Due to their relevance and problematic acuity, especially in times of neoliberal systemic imperatives that advocate the globalisation of standards at all levels and meanings of education, the curricular studies have raised different approaches, covering a broad epistemological-conceptual discussion, in addition to thematising the nature of the roles, functions, and decision-making power of education professionals. It is in the context¹ of a research project that, among other issues, we analysed the rationality underlying the involvement of mathematics teachers in the context of curriculum reforms. This analysis is based on Jürgen Habermas², and the suitability of his studies to discuss the teachers' participation as authors or actors of curricula, also illustrating it with empirical data from the research project.

It is, therefore, a text asking what we call the participation of teachers in processes involving curriculum, as well as referencing rationalities for empirical studies of the impacts of how teachers participate in scenarios in which curricula are elaborated/updated/ implemented, focused on the real decision-making power they are given.

ParticipAction in Habermas

Here we want to talk about teacher participation and curriculum, more specifically of mathematics teachers, in contexts and scenarios of curriculum development. For this, we will first share with the reader what we mean when we refer to participation. We take as reference Habermas (2012a, 2012b) and his senses about deliberative democracy and communicative rationality, before which, certainly, participating requires more than being/being part of something and relates to being able to be and hold decision-making power in interaction, being able to speak and act, having the possibility of achieving understanding os the situation in which the interaction occurs and of the respective action plans to coordinate their actions through understanding. That said, those who participate must have a turn and voice without coercion and in processes free of asymmetries.

In these processes, all those who participate refer equally to validity claims subject to critical analysis as to the truthfulness, rectification of norms and sincerity, each of these claims, constructed intersubjectively, announcing,

¹This is the project "A racionalidade subjacente em processos de implantação curricular e de avaliação em larga escala: um estudo comparativo entre Brasil e Portuga/The rationality underlying large-scale curricular implementation and evaluation processes: a comparative study between Brazil and Portugal" funded by the Fundação de Amparo à Pesquisa do Estado de São Paulo (Fapesp Regular Research Grant Process 16/16478-5) and the Coordination for the Improvement of Higher Education Personnel (Capes Process 88881.119177/2016-01).

² Jürgen Habermas, a German philosopher and sociologist, is linked to the tradition of critical theory, the socalled Frankfurt School, inaugurated by Horkheimer in the 1930s. Nevertheless, it breaks with several theoretical models developed by its first representatives, among them the dialectics of enlightenment by Horkheimer and Adorno. (Bressiani, 2016, p.13).

respectively, an objective world of facticities, a social world of normativities, and a world of subjective experiences. This Habermasian construction is based on Ludwig Wittgenstein's concept of language games (Wittgenstein, 2000), John Langshaw Austin's theory of speech acts (Austin, 1962), George Herbert Mead's symbolic interactionism (Mead, 1982), and Hans-Georg Gadamer's hermeneutics (Gadamer, 2002).

Still inspired by Habermas (2012a), we can consider that teachers' participation, and the actions resulting from it, in curriculum development processes would involve at least one duality in the concept of action, one focused on the teacher-curriculum relationship and another linked to a relationship between all subjects involved in the process. In the latter, we focus on this text, and we can glimpse a not always explicit difference between the subjects' interaction in search of a result, which makes use of instrumental rationality that require teachers to do what is necessary to make the curriculum development occur as idealised; and one interaction, oriented towards understanding, seeking consensus, where all subjects can freely put their claims that will be equally considered and appreciated, according to the power of the arguments that support them and not under the argument of power. Habermas (2012a, 2012b) calls the first action Strategic Action and the second, Communicative Action³.

Therefore, if we want to characterise the teachers' participation in scenarios involving curriculum development, analysing the rationality that underlies the interactions between the subjects involved in the process is a path. Indeed, because both Hokheimer (1980) and Adorno and Hokheimer (1985) expose the relational content of reason that controls, manipulates, subjugates, colonises, underpins subalternities and imposes oppression. This reason was characterised in the Habermasian theoretical framework as a specific type of reason, the Instrumental reason, which guides the Strategic Action that, being a rational action, differs from the other type, the communicative reason. In his theory of Communicative Action (TCA), Habermas (2012a, 2012b), among many analyses of modern society and reconstructive perspectives of rationality and discursive ethics, shows alternative ways to overcome rational action concerning ends, understanding its relational content. Identifying rationalities also makes it possible to seek ways to overcome them.

There are also other fundamental concepts for our intention - to share what we defend through participation- to be expressed: System and World of

³In this text, we capitalise the terms with conceptual load in Habermas (2012a, 2012b).

Life. Jürgen Habermas conceives society in terms of two categories⁴, System and World of Life, understanding them as "instances that oppose, but are at the same time interdependent, constituting a dialectical complex that determines the way of being of modern society" (Mühl, 2003, p. 208). Participation can be characterised, according to the imperatives that are established between Systemic Actions (which translate into impositions that place teachers without negotiation possibilities and that often place them in hostage conditions), and the expressions of the World of Life (which are shown in the needs, beliefs, values, and principles the teachers defend).

A third Habermasian conceptual category that interests us in this article is the Public Sphere. Habermas (1984) defends it as a space of historically inscribed conceptions⁵. This construct, beyond criticisms and considering them, has always been important for democratic theory, being a powerful element to debate the relationships between subjects living in stratified and multicultural societies (Benhabib, 1996; Fraser, 1996). Losekann, (2009) points out that the Public Sphere is the only connection between ordinary people and the constituted power, being also a space for identification and perception of reality and social problems. The spaces to be constituted as a Public Sphere have the potential to bring together those involved with a common interest in discussions with symmetries of speech, seeking Consensus and Understanding as an alternative to the instrumental character of decision-making in society. In those spaces, the issues of the World of Life can be posed and appreciated as coping with Systemic issues.

⁴The World of Life is the space that supports the development of Communicative Action, as it includes the established and aproblematic interpretation/definition of communicative daily practices. Action and Discourse are distinguished in the Habermasian perspective and are made possible by the collection of the World of Life. Action represents a continuous aspect in everyday practice and the Discourse comprises the suspension of the continuous character and the argumentation of validity claims, representing the need for renegotiation. The System is constituted in the coordination of action by means related to power (comprising market, capital and State), teleological action and Instrumental Rationality, attributing to human beings the role of consumers.

⁵The distinction between the public and the private is inscribed in an attempt since Western antiquity, and makes a strict distinction between the private sphere (oikos) and the Public Sphere (polis), the first being particular to each individual and belonging to his/her domestic world, and the second the one that manifests itself in the space common to all citizens. (Silva, 2001).

Teachers authors and teachers actors: much more than just a few letters changed

Up to this point in the text, we tried to build an understanding with the reader about what we defend through participAction, considering teachers in scenarios and contexts of curriculum development. And we hope to have been able to clarify that participation, in this text, involves Communicative Action. Based on this, we now want to make another defence: that the teachers' participAction requires understanding them as authors, rather than actors, in those processes.

We now come to think of the teacher as an author in curriculum development processes. Here we draw inspiration from both Pinar *et al.* (1995), for which one of the important dimensions of the curriculum is the teacher's role, differing from that of the executor, and Pacheco (2014), for whom considering the teacher as author and protagonist in the elaboration of the curricula allows us to identify the conceptions of knowledge and mathematics implicit in them.

The teacher, as an author, has intellectual property on curriculum, participating in idealisation, theorisation, and choices, not being the one who performs what is thought by another. This makes him/her have a relationship of authorship with the conceptions of society, education, formation, and knowledge that a curricular organisation expresses. In this scenario, the teachers assert themselves by their professional biography, evoking their trajectory of interaction with teaching and other teachers, with the school traditions and transformations, with the contemporaneity of students, and not only by the technical aspects of the profession.

Thinking of the mathematics teachers as authors is to accept that their history and action cannot be written by others. To have the teacher as an author is to go against what has historically been occurring in cases where curricular reforms or changes in the epistemological plane are imposed, disregarding the teacher as a person (Goodson, 2015). Instead, they often sought to introduce changes that agreed with the System, as if they insisted that something was going to happen, disregarding the teachers' World of Life. Nor does it seem improper to say that the teachers' "resistance to change" is too often seen as a delaying element of reform, or rather than being seen as a central piece, according to Goodson (2015), the teachers have been the ones who "make reforms more expensive," as they need much "training," awareness-raising actions, and "materials" to convince them and translate the ideals of those curricular reforms. For the author, this "perspective is potentially catastrophic

for the succession of reforms and change initiatives we have seen." (Goodson, 2015, p.63).

Now let us think of mathematics teachers as actors. And here we evoke a simple analogy with the activity of actor and actress, I defend the fact that those who act do not always write the role they will play. The "teacher as an actor," we understand to be the paradigm that educational reforms invariably adopt from the mistaken assumption that, since not everything is well in school (which is nonetheless true), reform and changes will only bring improvements (which is false, because not everything in reforms results in benefits). This assumption pervades the idea that clear enunciation of objectives, policies of measures and tests, accompanied by strategies of accountability and confirmed by a series of incentives, including financial, and return on results will guide the teacher through outlined paths that, if followed as planned, will result in a successful reform. Therefore, we agree once again with Goodson (2015) in exposing the entrails of neoliberalism in education and stating that

Regarding teachers, the story is as follows. The old times of self-employed professionals that can decide on their classes are over: the "new professional" is technically competent, obeys a set of guidelines and sees teaching as a work in which, as in all others, he/she is managed and used to correspond to what he/she asked of it. Educational change at the level of education means replacing "old professionals" with "new professionals" as soon as possible. Once this operation is completed, after the "former professionals" have been "tidied up," we will have an "improved" and a more "efficient" school system. This story resembles, in part, the restructuring initiatives implemented by various industries and services (p.64).

Peralta (2012; 2017; 2019) and Peralta, Pacheco, and Neves da Silva (2018), analysing the impacts of the curricular implementation in the state of São Paulo from 2008, report that the method of implementation of the change process could have privileged much more the success of the enterprise than the nature of the change yearned in the mathematics teachers' practice. Moreover, they found that those teachers rejected the proposals presented, and this rejection is probably because they do not feel involved, do not feel active participants in the processes of development of mathematics curricula in São Paulo.

Indeed, Leite and Fernandes (2010) had already pointed out that studies carried out in this field indicate different ways of conceiving curricular

restructuring. At one end, we have those who, in a *top-down* curricular organisation logic, defend controls and attribute to teachers the role of complying with prescriptions; at the other end, we have those who believe in "(...) autonomy, intending to see the solution in decentralisation and a better qualification for schools and teachers." (Bolívar, 1999, p. 157). In both conceptions we can understand "that it is indispensable to win teachers for the effort of change" (Fernandes, 2000, p.76) and note that "regardless of how noble, sophisticated or brilliant the proposals for change and improvement may be, they represent nothing if teachers do not adopt them in their own classrooms and do not translate them into an effective professional practice" (Fullan & Hargreves, 2000, p. 29).

Although the above perspectives are presented in a somewhat simplistic way and subject to considerations, suggesting antagonisms, there is some consensus about the notions of teachers as central in the implementation of changes. (Leite, 1997, 2002, 2003; 2006; Fernandes, 2000, 2007; Pacheco, 2001, 2014; Peralta, 2019). The question lies precisely in the sense of this centrality, whether as actors, consumers or supporting actors; or as authors, protagonists of mathematics curricula.

Curriculum Development: what are we talking about?

We do not think it is an exaggeration to propose that the current moment requires rethinking the role of all involved and producing knowledge about authorship in curriculum development processes, at times in line with a global reforming order of centralisation and standardisation. Rather, we should share with the reader our understanding of curriculum that, in a recent interview, José Augusto Pacheco expresses:

> Although the practices are still dominated by a traditional and bureaucratic conception of the curriculum, today, in conceptual and epistemological terms, especially from 1975, with William Pinar and the new sociology of education, the curriculum is seen from a more humanistic, less technical, less bureaucratic, more participatory perspective. There we have the contribution of several authors, such as William Pinar and Michael Apple, who seek this conceptual and epistemological contribution in Habermas, in the theory of communicational action in Habermas, the role of intersubjectivity, the role of the subject, incidentally, and later, in the exploration of Paulo Freire's

concepts of awareness and agency. This conception of the curriculum – more as a project, not as a plan; more open, not closed – has been dominated today, especially from William Pinar's ideas, by the reconceptualisation of the field. The field was excessively dominated by technique; it was necessary to be reconceptualised, giving another humanistic side, more focused on people, more focused on students, teachers, the community. (Backes, 2020, p.773-774).

The concept of mathematics curriculum development, of course, is related to that of curriculum. However, according to Pacheco (2005, p. 49), the perspective of the "curriculum construction process" is emphasised in it or, as described by Gaspar and Roldão (2007, p. 32), it adds the "idea of integration of its phases, because its structure is procedural." Nevertheless, the same plurality and diversity characteristic of curriculum conception accompanies that of mathematics curriculum development, both within the meaning of the terms, relating the idea of development to a procedural plan of instruction and/or pedagogical action, or in a broad sense, as a project that goes beyond a plan of intentions and its accomplishment for the fulfilment of mathematical education.

From the Instrumental Rationality perspective, guided by technique, the main actions of the processes involving a mathematics curriculum (elaboration, implementation, and evaluation) are subject to delimitation, categorisation and characterisation (of purposes, methods, and goals) in a segmented way, while, from the perspective of Communicative Rationality, this compartmentalisation is rejected, understanding this process as a "shared enterprise," in which the deliberations that take place at the level of the performance of mathematics teachers are considered (Gaspar & Roldão, 2007, p.47). In a rational communicative perspective, there cannot be those who think curriculum and those who execute curricula, nor organisation and development in spaces and times different from each other.

Still in Gaspar and Roldão (2007), three characteristics of the concept of curriculum development can be enumerated as follows: i) the nature of the process; ii) the idea of sequence, which preserves the sense of stages that follow each other in an articulated way, shaping the path inherent to the curriculum; and iii) the concept of continuity, attributing a sense of vitality to the curriculum process, without gaps, without leaps, without interruptions (an active school is never in curriculum vacancy even in periods of reform). As for Pacheco (2005), curriculum development is not restricted to intentionality, planning, construction, implementation or evaluation. For us, mathematics curriculum development is made in the integration between all these phases/processes/dimensions of the mathematics curriculum, necessarily articulating the domain of its achievement, configuring a dynamic and integrative process, from the specific nature of mathematics to the concepts of society, education, formation, and knowledge, equivalent to a (re)construction of decisions to encompass epistemological and philosophical principles and establish, on the basis of concrete principles of mathematics education, "a bridge between intention and reality, or rather, between the socio-educational project and the pedagogical project" (Pacheco, 2005, p 49).

In Pacheco (2005), we also find curriculum development taken by the lack of distinction between moments of design and implementation, arguing that "curriculum development, *lato sensu*, is a dynamic and complex practice that is based, planned, performed, and assessed at different times, but related to each other, which express the same reality" (p.50).

Supporting what has been defended so far in this text, we have Ivor Goodson's position considering that, although the curriculum is "manufactured in a variety of areas and levels" and "the distinction between the written curriculum and the curriculum that happens in the classroom is very important," it is risky to study the first regardless of from the second, that said, because this reading could result in the understanding of dissociability between them. (Goodson, 2001, p. 52).

Roldão (2017) emphasises that curriculum development today is at the centre of the teaching profession, necessarily implying taking options and making decisions about the "costume that the curriculum should take in each specific context. It implies more autonomous and collaborative teaching work logics" (p.22). However, and here we put our interpretation, the way mathematics curriculum development is presented to teachers, or rather, the rationality that underlies the processes involving the teachers' participation can directly impact this logic of teaching work related to mathematics education.

FRAGMENTS OF SEARCH FOR PARTICIPATION

To illustrate all we have advocated in this text so far, we now share some data from a comparative study that was delineated from the description and analysis of conjectural structures, the history of curricular reforms, and large-scale assessment systems that focused and focus on the educational systems of Portugal and Brazil. In this sense, our analytical movement seeks not to compare the universal, but to focus on phenomena, because we understand that in them, especially those guided by discursive interactions, rationalities manifest themselves, evidencing Systemic and World of Life issues, as well as spaces and situations with characteristics of the Public Sphere.

From the data constituted, we built a framework that allowed us to discuss mathematics teachers' participation in curriculum development processes, among other things. From this framework, for this text, we focused on the analysis⁶, according to the discursive ethics by Jürgen Habermas (Taveira & Peralta, 2021), of the Project for Autonomy and Curriculum Flexibility (of the Ministry of Education of Portugal) and the Project for Curriculum Prioritisation (of the Municipal Department of Education of São Paulo), from which we selected excerpts from the "base documents⁷." Also, in methodological terms, we present fragments of reports from two managers, one from each project, that illustrate how mathematics teachers were involved, beyond the systemic discourse of documents, but from the perspective of the World of Life.

The Project for Autonomy and Curriculum Flexibility (PACF)

The Portuguese educational system, "to provide the Portuguese legal system with rules that guarantee and promote the progressive strengthening of autonomy and greater organisational and pedagogical flexibility of schools, essential conditions for the improvement of the public education system" (Portugal, 2012a), has undergone a review of its legislation⁸. At the core of this review, curriculum flexibility becomes paramount as a measure to relate students' learning to pedagogical practices, such as interdisciplinary work, in projects and groups. Flexibility gains momentum in 2017/2018, with the "Project for Autonomy and Curriculum Flexibility" (PACF), formally implemented by Order No. 5908/2017 (Portugal, 2017a).

The PACF, as elements that limit, standardise, and regulate it, reference produced documents that schools and teachers must follow, namely, Essential Core Curriculum (Aprendizagens Essenciais - AE) (Portugal, 2018a) and the

⁶Methodologically, the perspective of discursive ethics by Jürgen Habermas as presented in Taveira and Peralta (2021) was used.

⁷Document that expresses guidelines for the development of those projects.

⁸See https://www.dge.mec.pt/curriculo-nacional-dl-552018.

Students' Profile at the End of Compulsory Schooling (Perfil dos Alunos à Saída da Escolaridade Obrigatória -PA) (Portugal, 2017b). To ensure the necessary conditions for the operationalisation of the PA and converge with the AEs in such a way that it could guarantee the implementation of the PACF,⁹ the Pilot Project for Pedagogical Innovation (Projeto Piloto de Inovação Pedagógica - PPIP) was implemented on an experimental basis in the academic year 2017-2018,¹⁰ stating permission to manage the curriculum flexibly and contextualised from the invitation made to School Clusters (Agrupamentos de Escolas¹¹ - AE). Seven (initially six, and then a seventh one was included) School Clusters¹² from different contexts (rural and urban areas, smaller and larger areas) were invited, whose implementation should be done using the resources already existing in those schools, without adding any benefits.

According to Pacheco (2018), generally, the first steps were taken on a voluntary basis, then they were extended to all schools, with a mandatory character, because accountability through external assessments is a reality in Portuguese basic education that has currently been typified from three curricular documents: the Curricular Plan, the Students' Profile and the Essential Core Curriculum.¹³

⁹The school year is divided into two semesters, the first from September to January and the second semester from January to June. Therefore, the 2017/2018 school year refers to classes from September to December 2017 and from January to June 2018.

¹⁰The PPIP was authorised on a pedagogical experience basis and allows the schools of the invited Clusters to choose to manage the distribution of time, programmes, and goals, as long as they ensure that students acquire the skills provided at each end of the cycle, and can create new curricular areas. However, everything must be duly substantiated and approved by the Ministry of Education. All seven Clusters invited have a prominent track record in some other government initiative.

¹¹School Cluster is an organisational unit of the educational system of Portugal, with its own administrative and management bodies, consisting of educational institutions (schools) from a common pedagogical project. In comparative terms, they would correspond to the regional boards within the organisation of the state system of São Paulo.

¹²Besides the seven Clusters invited, at least 226 more organic units participated in this pilot phase, which, upon expressing interest, presented projects indicating curriculum dimensions in which they would like to have curricular flexibility and autonomy to "innovate." All these 226 units were able to participate after having their requests approved indicating "where" and "what" in the curriculum could have autonomy to innovate. Authorisations were made, considering the context of each school, as mandated by the decree-law that established the Project. All this prepared for the PACFs to be generalised to all schools in the academic year 2018-2019, still on an optional basis, through Decree-Law No. 55/2018 of July 6 (Portugal, 2018b), which establishes the curriculum of basic and high school education and apprenticeship assessment.

¹³Cf. Decree-Law No. 55/2018, of July 6.

The analysis of the periods of curriculum change, from 1986 to 2018, revealed that the curricular plans underwent more significant changes, in four moments, in intervals of 12, 11 and 6 years, respectively: 1989 curriculum reform, 2001 flexible curriculum review, 2012 partial reform, and 2018 pedagogical innovation. These cycles are cyclical, determined, above all, by governance and its political colour, although the international context cannot be disregarded, with a decisive role for reforms in the United States of America and the role of conceptual influence of the OECD¹⁴. (Pacheco, 2019, p. 49)

The document

Ordinance No. 5908/2017 (Portugal, 2017a) establishes that

Within the framework of curriculum autonomy and flexibility, schools may **manage up to 25 % of the weekly workload** enrolled in the basic curriculum matrices per school year, or, in the case of youth education and qualification courses and vocational courses, of the total workload of the education cycle." (Portugal, 2017a, emphasis added)

The Ordinance shows a relationship between a school that depends on external prescriptions, but with a certain margin, of well-defined limits, of action according to local needs. Having ³/₄ of prescriptions and ¹/₄ of possibilities, and those relying on the need to be pre-approved and monitored during their development, does not seem to give the school space for curriculum development and teachers an authorial role, even if there is a margin that can be expressed by practices that demonstrate creation, insubordination, creativity in this process.

Costa and Almeida (2018) report that the 2018 cycle of pedagogical innovation removes curriculum importance from programs, replacing them in the organisation of curriculum practices by the AE, i.e., centrally defined contents to serve as a reference, in elementary and high school education, for internal (school) and external assessment (of the Ministry of Education through benchmarking tests and national examinations), incurring a curriculum alignment.

¹⁴Organisation for Economic and Cooperation Development. See more at http://www.oecd.org/fr/.

What Costa and Almeida (2018) observed seems to agree with the OECD report (2018)¹⁵, which recommends that the curriculum should be aligned with the teaching and assessment done. Thus, a national curriculum based on school subject plans and academic times, in a profile of formation and essential core curriculum, which are content *standards* for external assessment purposes, is justified. It seems pertinent then to question the influence of this organisation on the Portuguese curriculum development, associating it with the qualification logic anchored in the thesis of human capital (OECD, 2007).

Therefore, and here we agree with Pacheco (2019), the notion of curricular alignment is established as a characteristic in the OECD discourse (2018) either through the legitimation of the competence-based approach, or through the orientation to the development of a curricular centrality, which ensures learning (sometimes adjectived in the specialised and/or governmental literature by terms and expressions as essential, fundamental, minimal, to which one is entitled, of objectives and development), conveyed as national, but with a view to the global context, which in Portuguese reality is expressed by the EA, which are the baseline for large-scale assessments. And here, using Charlot (2013), we draw attention to the "global" as that which "derives from globalisation, which, in its current form, expresses a relationship of power" (p. 175).

Regarding teachers, they are recognised

as main actors in the development of the curriculum, with a fundamental role in its assessment, reflection on the options to be taken, its feasibility and suitability to the contexts of each school community" (Article 4, d) and involving "students and those in charge of education to identify curriculum options" (Article 4, e). (Ordinance No. 5908/2017, of July 5, emphasis added).

When we read in the document that teachers are recognised as "main agents," something comes up; and at this point, we turn to Fraser (2002), about the politicisation of the struggles for recognition not corresponding to the redistribution that leads to social justice in the context of globalisation. That

¹⁵In OECD (2018), we find a curriculum perspective that is stated in a logic of cognitive, social, and personal skills. The OECD influences the introduction of innovation language to curriculum development. As a result, it relies on assessments of performance measurements and indicators, content *standards*, *accountability* policy, and a market curriculum theory (Pacheco, 2018).

said, by the reification of collective teaching identities: teachers have the power to do many things (they teach, transform lives) and they deserve all the merit, this seems easily acceptable. However, by replacing recognition with the redistribution of rights, appreciation of the World of Life, guarantees and materiality in action in a globalised world, where the different types of struggles those professionals face are inappropriately fitting into transnational processes, we conclude that the teachers' "power" and "merit" are risks calculated by the System, meticulously limited by Strategic Actions and limited by the Instrumental Rationality that guides them. To counter this reification of the teacher as a "main agent" in curriculum development, recognition should be linked to redistribution. To counteract the threat of an inappropriate framing, a conception of multi-level sovereignty of teaching activity is necessary to decentralise such a framing into possibilities in decision-making.

Therefore, how can teachers, managing only 25% of the curriculum and without additional resources, but having to respond to the demands of standardisation of performance goals, innovate, exercise autonomy, and be authors in curriculum development processes? The text of Ordinance No. 5908/2017 (Portugal, 2017a) expresses normative contexts that, although there is always the possibility of teachers overcoming systemic imperatives and combating the colonisation of the World of Life to some extent, clearly point out how the curriculum consists of norms that are established nationally, with the issue of school curriculum autonomy and the participation of teachers realities that deserve discussions on the actual rationality, discussing the tendency of curriculum policy to be decentralised, at the level of discourses, and (re)centralised at the level of classrooms (Pacheco, 2003; Peralta; Pacheco & Neves da Silva 2018; Peralta, 2019).

One report

One of the seven Clusters invited to develop the PPIP was accompanied by the first author of this text in the first half of 2018, and who, among other activities, interviewed the responsible for the project in the Cluster in March of the same year. One of the questions addressed to the manager was: how do you analyse the Pilot Project that opens space for Autonomy and Curriculum Flexibility and how has the participation of mathematics teachers been? The answer is

We clearly have political measures that set out to recognise the national curriculum¹⁶ as a project that needs to sustain itself locally, considering schools as places to decide what curriculum is and teachers as agents. At the same time, we are put in a situation where, without additional resources and with a small margin of change, we have to make the school a place to innovate. To exercise any margin of curriculum autonomy, the administrative and management bodies of Cluster XXX decided to accept the invitation. This is good about the Project: there are always meetings. Mathematics teachers, on the one hand, have declared to be for changes. too, they agree that some autonomy is better than none. On the other hand, they are also somewhat passive because they are often used to being put to carry out the already ready planning. Therefore, apparently, feelings of frustration are justified in the face of situations and tasks that need to be performed within the margin of a quarter of the curriculum only. Although schools and teachers can make decisions - even if they do so in agreement and within the limits authorised by the General Directorate of Education- it is a policy that¹⁷ incurs constraints, because the philosophy of the project about innovation, autonomy, and flexibility does not seem to be compatible with external assessments and goals of the project basic curriculum planning. We are not allowed to change the assessment logic, only methods and times, for example. The external assessments to which students and schools are subjected cause a lot of tension among mathematics teachers and show how much teachers are held accountable for the academic results obtained in this discipline. Mathematics teachers' concern centres on the fact that **planning is in tune** with national exams and international tests. They are calling us to innovate, but we are also called to comply with

¹⁶Portugal has a long history of centralised curriculum policy.

¹⁷The General Directorate of Education (Direção Geral de Educação - DGE) is a central service of the direct administration of the State endowed with administrative autonomy, ensuring the implementation of policies related to the pedagogical and didactic component of preschool education, elementary and high school education and extra-school education, providing technical support to its formulation and monitoring and assessing its implementation. See more at https://www.dge.mec.pt/

prescriptions emanating from transactional organisms. OECD reports are always cited. PISA is always remembered in meetings. Media conveys how the Portuguese government is giving freedom for schools to change curricula, innovate in pedagogies, and end school failures. However, they do not proportionally convey the conditions and limits that are imposed. The curriculum plan, defined at the legal normative level, defines both the mandatory and the elective subjects and the academic workload per day, week, year, even if you have the flexibility to manage the so-called local curriculum by 25%. Thus, you can choose one or another discipline abd the teaching workload of each discipline in the set of a cycle or level of education, but the logic does not change. The possibilities of choice take place within a pre-established **universe**. And in this context, we can understand the teachers' (especially math teachers) mistrust and scepticism. The students' mathematics performance is not invisible to the media, or the population, or the government. [Manager of AE XXX, March 2018, emphasis added]

Based on our emphasis in the transcription of the project manager's report with the School Cluster, who we will call AEXXX to preserve anonimity, we would like to draw attention to what appears to be the importance of the strategy action. Such action propagates some power of participation to teachers, in a cruel sense, by offering a small margin for changes and making large demands for results. We also note a culture that spreads the global as local, while (de-)politicising the teacher's role as an agent - and, therefore, curbing the perspectives of transformation of the current Rationality in curriculum development. Thus, we understand that, as an example of a striking feature of Instrumental Rationality, by allowing space for the teachers to place themselves as "agents" (pretending to value the World of Life) and schools to meet to discuss what choices they will make within what is allowed (pretending the constitution of a Public Sphere), an important element can be apprehended from the PACF in Portugal: the generalised (de-)politicisation of autonomy. In fact, the claim for autonomy is a driving force for many debates and struggles and needs to be valued. However, a 25% management margin has been disseminated with an emphasis that goes far beyond what it really represents as an opportunity for teachers to establish a relationship of authorship with and from the curriculum.

The Curriculum Prioritisation Process

In Brazil, curricular centralisation gained strength and expression with the National Education Plan - PNE (Brasil, 2014) that in 2015 became the National Common Curricular Base - BNCC (Brasil, 2015). During the following two years, the BNCC was the subject of the most important debates related to education in the country. A final document that covers early childhood education and elementary school was approved by the Ministry of Education (MEC), in a third version, on January 20, 2017. Only on December 14, 2018, the document about the high school curriculum was approved. Together, the curriculum guidelines for early childhood education, elementary school, and high school constitute the BNCC for basic education.

Parallel to this national movement of centralisation, the Municipal Department of Education of São Paulo (SME) undertook its own path of curriculum updating, in which the BNCC's proposals were articulated with other studies taken by the team as appropriate to guide its implementation. The curricular construction of the SME was placed as a project organised from the network representative working groups, involving teachers, education specialists, students' relatives/guardians, students, in debates and in the elaboration of proposals. The groups were constituted with representatives of the thirteen Regional Directorates of Education (Diretorias Regionais de Educação - DRE), under the coordination of the teams of the Technical Curriculum Centre (Núcleo Técnico de Currículo - NTC), and the Division of Elementary and High School (Divisão de Ensino Fundamental e Médio - DIEFEM), as well as advisors from different areas of knowledge. Schools presented their contributions through research developed in a digital environment (Palanch & Freitas, 2018).

Currently, the SME continues the process of consolidating the City Curriculum (Currículo da Cidade) and, depending on the scenario of the pandemic by Covid-19, structures the Curriculum Prioritisation (Priorização Curricular - PC) project. DIEFEM, in partnership with the NTC, guides this process and aims to analyse the curriculum development movements already in progress, especially in relation to BNCC, and develop guidelines for the similar and necessary movement in relation to the City Curriculum of elementary school. The document "Curricular Prioritisation in Elementary School," still in preliminary version and under construction, brings the principles and purposes of the PC, and the structuring of the development of the project from agendas, schedules and consultation procedures, assessment and formation of the education network. The project involves, besides the NTC team, specialist teachers ¹⁸ of the SME, specialist teachers of the Educational Units (by representation and invitation): preferably teachers already involved in the curriculum discussion processes and preparation of the material Learning Trails and School Supervisors (Trilhas de Aprendizagens¹⁹ e Supervisores Escolares) (by representation): who preferably had already appropriated the curriculum of the area in which they will participate. All those people will compose the Working Groups (WG).

The document

On page 2 of the Document, we are faced with

the PC process is divided into two steps. The first step will be carried out through the WGs, which will analyse the network learning data, experiences from other teaching networks, available mappings, among others, and will perform a first **indication of the objects of knowledge and the OADs.** The second step, complementary to the first, will occur after the application and results of the diagnostic assessment and **will allow a more refined adjustment of the** OADs prioritised, aiming to recover learning and the specific needs of the UE. (São Paulo, 2020, p. 2, emphasis added)

Thus, as in the Portugal experience, here we also note a concern to involve, listen to, consider local needs, however, there is no other understanding of forms of curriculum development than those involving prescriptions. The concern with participation, although there may be intentions to promote democratic principles, cannot transcend and overcome the rationality that intends to succeed in the enterprise thought by the responsible teams. The concern is to involve so that what is planned materialises. Apparently, there is no room for project reformulation, either partially or fully, if teachers see it as necessary.

This rationality of the System is evident in the proposition of Strategic Actions that prioritise the bureaucratic status to communicative interaction, aiming at the success of what has been planned.

¹⁸Specialist teachers are those who are qualified in specific areas of knowledge, such as Mathematics, History, Geography, etc.

¹⁹See https://educacao.sme.prefeitura.sp.gov.br/trilhas-de-aprendizagens/

Which indicators should be consulted by the WGs?
•External assessments (SP Test)
[...]
• Google Classroom access data and indicators.

• Learning data available on the network – **SGP**²⁰. (São Paulo, 2020, p. 2-3, emphasis added)

Habermas (2012a, 2012b), from theorising about Modernity, problematises rationalisation as equivalent to the development of a rationality that values technique, control, and calculation that erodes the bases of criticism and leads to a progressive increase in domination. In this sense, when faced in the PC with the search for indicators that value the objectivity of the numbers to justify the actions, invariably, we put ourselves to think about the trivialisation of the power of subjective analysis and the affirmation of the impotence of the individual in front of a whole that stands above the subjects and makes it difficult for them to organise themselves to counteract.

The collapse of methods in teaching networks has been faced with reforms that have been limited to the prioritisation of care of systemic instances to the detriment of, or disregarding, subjectivities, hindering intersubjectivities, or even in the harmonisation of these contradictory instances, aiming at the adherence of subjects to enterprises that promise space for participation and simulate decision-making power. As a result, a curricular endeavour, in the sense of conveying pre-established knowledge in a pre-established way, according to the "level" of the students indicated by "evaluations," can be understood as more at the service of the modelling of society than of its development based on ideals not merely economic. Thus, strangely enough, educational activity is simultaneously glorified and reduced to "acceptable" (preferably numerical) indicators.

What criteria should be met for decision making?

• Learning as a focus

• Curricular prioritisation guided by criteria of relevance, suitability, integration, and feasibility

• Looking at the "present and future" considering progression in learning - attention to learning cycles and transition

• Consideration of the **innovations** and principles brought by the City Curriculum:

²⁰It refers to an institutional management system.

- Overall Education
- Inclusive Education
- Equity
- Know-how Matrix
- Sustainable Development Goals (SDG)
- Relationship between components/areas of knowledge (interdisciplinarity)
- Relationship between objects of knowledge of the components themselves (intradisciplinarity)

• **Analysis of the learning indicators** we have as a network. (São Paulo, 2020, p. 02, emphasis added)

In the excerpt from the document above, we note similarities with OECD guidelines (2007) and direct references to the Sustainable Development Goals (SDG)²¹. Apparently, guiding curricula by the principles advocated in the SDGs would be appropriate and desirable. After all, who would be against something that aims to improve people's lives? However, a more attentive analysis, dating back to the context, to the institutions involved, and to the rationality present in the proposition of such objectives, makes it possible to highlight the hand of liberalism, well positioned to seize everything and everyone that is needed for capitalist society to survive.

Sugahara and Rodrgiues (2019) show a historical analysis of the concept of "sustainable development," highlighting the interests behind one of the most widespread agendas of the late twentieth and twenty-first centuries. It is a belief in an "economic growth and reformist greening" (p.41) of society, without, however, considering freeing it from an economic reality of consumerism of market capitalism and guiding freedom in politics and not only in the economy. SDGs 4 and 5, for example, have relevant goals but do not fail to comply with the Instrumental Rationality prevailing in capitalist society. These SDGs have relevant goals, but they do not question the causes, and place education as a redeemer of society, whereas for education to fulfil its potential,

²¹Presented by the United Nations, the 17 SDGs are: 1. No poverty, 2. Zero hunger and sustainable agriculture, 3. Good health and well-being, 4. Quality education, 5. Gender equality, 6. Clean water and sanitation, 7. Affordable and clean energy, 8. Decent work and economic growth, 9. Industry, innovation and infrastructure, 10. Reduced inequalities, 11. Sustainable cities and communities, 12. Responsible consumption and production, 13. Climate action, 14. Life below water, 15. Life on land, 16. Peace, justice, and strong institutions, 17. Partnerships for the goals. From these 17 SDGs, 169 goals are still derived and/or unfolded. See more at https://nacoesunidas.org/conheca-os-novos-17-objetivos-dedesenvolvimento-sustentavel-da-onu/, accessed October 26, 2020.

the social environment needs to be transformed, or we run the risk of forming more consumers of and for the capitalist system.

Moreover, the goals of SDG 5 fall well short of the Fourth World Conference of Women in Beijing (1995), which advocated, besides the recognition of gender issues and relations, the redistribution of power, rights, guarantees, and spaces that have long been denied to the entire population that, in the spectrum of gender expression, withdraws from²² androcentrism (Fraser, 2000). Not to mention that gender in the SDGs is based on a binary notion, seeming to disregard the LGBTTI+ population, intersectionalities are not mentioned, nor do they adequately address racial inequalities and other social inequalities in their broader formulations. In other words, treating important matters as if they were a generality is very much to the taste of neoliberalism so that, if appropriate, it can advance or retreat when dealing with those matters, without political or economic damage.

In this sense, a curriculum development that considers propositions and formulations of international organisations more committed to economic power shows how people and institutions deal with actions that are often characterised by identifying and criticising processes of rational clarification, such as education. They are not immune to the institutionalisation of Instrumental Rationality. Although in Modernity, so dominated by pathologies (Habermas, 2012a), the symbolic reproduction of society depends on rational actions oriented toward understanding and not controlling and/or manipulating, there are forms of social reproduction that are linked to the latter, although their authors do not consciously and individually accept actions of domination.

The report

The authors of this chapter have followed this beginning of the Curriculum Prioritisation project and in October 2020 they heard one of the people in charge who is part of the team that coordinates the work. In response to questions, with the same content as those made to the manager of the Portuguese project investigated, we have the following report.

Where I work, the PC is considered a step in a process that involves the selection of learning and development objectives (OADs) of each curricular component. Among those who had

²²A perspective focused solely on what it is, comes from, or identifies with what is proper to the masculine and taken as valid for all human beings.

been thought of for a given school year. a Working Group. composed of teachers and technicians from the Secretariat of Education. selects the priority OADs. These should be the ones that teachers need to work on when they return to faceto-face teaching. The idea of essential learning, perhaps, was the most enlightening. Although I, in particular, found it conflicting. I explain: since we started a movement of Common National Curricular Base in our country, we decided to work with the idea of essential "skills" or "learning." This effort to consider essential, and not minimal, has to do with the fact that we want to move away from the idea of the minimum curriculum that lasted in Brazil as the one that offers the minimum to the poorest population in the country and not the essential. However, with the resumption of Curricular Prioritisation, we speak - once again - of essential learning. It seemed contradictory to me because we had already said that such learning, contained in the BNCC and in the curriculum document of the network in which I work, is essential. It made me think of a contradiction: are we choosing essential *learnings from the essentials*? *This is what we did. From my* pointo of view. it's inconsistent. We have not vet implemented it, but the main difficulties have to do with selection, which always generates conflicts and unproductive theoreticalpractical partisanships. I'd describe it as representative. In a network of more than 560 schools, it is impossible to think of anything that listens to and accepts the voice of all teachers. The representativeness by region, although not the best, is the most sensible way, given the short time. Those in the Working Group have reacted well to the proposal, despite conflicts in one or another curricular component. But they have participated in the selection of the OADs in a qualitative and, above all, productive way. There are formative activities planned for teachers when they return to face-to-face teaching. At this moment, the Working Groups are not formative, but deliberative actions. These are meetings with teachers of the network, chosen to represent the 13 regions of the city, and the technicians of the Secretariat who are familiar with each of the curricular components. Four-hour biweekly meetings are planned. [Member of the NTC Team, October 2020, emphasis added]

In the same way, as we proceed with the report of the manager of the Portuguese project, here we also emphasise terms, expressions, and phrases that we understand to illustrate what we intend to discuss in this chapter: how much the "participation" of teachers in contexts and scenarios of curriculum development has been guided by Strategic Actions that aim to much more to achieve teachers' adherence, because of the need that, with their work, they ensure the success of the enterprise, than effectively grant them or even share with them the authorship. And at this moment, unless we are talking about professional managers hired to do the business management of the projects, we put those who are in charge of managing curriculum development projects, together with teaching networks and schools, in the same condition of teachers before the System. Also because most of the times they are career teachers, working in management positions or similar.

Thus, although the discourses express concern with representativeness, Instrumental Rationality is not subverted, transcended and, much less, overcome. That said, because one cannot speak of participAction, according to Habermasian assumptions, without the provision of spaces that, not being able to be confused with the institution or something rigidly organised, offer the possibility of exposures, tensions, conflicts, and confrontations of Systemic issues and issues of the World of Life. Moreover, it is not possible to talk about participAction without changing the rigid limits of alteration, change, transformation, that teachers have historically presented in relation to curriculum development. Hence, in relation to the teachers' participation and the contexts of curriculum development, we would necessarily observe in such contexts spaces and/or conditions that are more like the characteristics of the Public Sphere. This requires the interlocutors to put aside their structural differences to dialogue in a condition of equity. Inequalities must be eliminated so that Habermas' proposal (1984) is possible. Given this, the analysis of inequalities, determining hierarchical positions that do not disappear in the coordination of actions, in situations of interactions between subjects, can become an element that characterises the teachers' participation in contexts involving curriculum development.

In other words, in scenarios of curriculum development, it is expected that the actions occur mediated by discursive interactions. In such interactions, in turn, teachers are expected to be able to make use of speech acts²³ in public

²³Speech acts can be understood as objects of a linguistic action. The subjects are not only the authors of the speech, but also rational interlocutors, conferring pretensions of validity susceptible to criticism. (Focas, 2007, p 159).

debates. In those debates, if teachers can act - including with decision-making power, regardless of the social position they occupy, but being able to validate everything that forges their identities and ways of being and being in their lives-, it will be a powerful element of analysis of what we are defending here by teachers' participation in curriculum development processes. We do not forget here that in societies with a tendency to stratification "there are asymmetrical positions of access to wealth, power, culture, prestige, etc., these will be reflected in the same way in the public sphere" (Losekan, 2009, p.44) and should not prevent teachers from effectively participating in curriculum development processes. Then, we would be talking about teachers who author curricula.

CONSIDERATIONS THAT ARE NOT FINAL

Historically, both in Brazil and Portugal, the educational systems, even expressing a rhetorical discourse on autonomy and flexibility, have been hostages to centralist global policies. (Marinho; Leite & Fernandes, 2019; Leite, 2019). This movement seems to be related to the so-called Global Educational Reform Movement - GERM²⁴ (Sahlberg, 2011, 2016) which, guided by the logic of standardisation of education in the face of a global agenda led by the OECD and the World Bank, disseminates a programme with rules, prescribed curricula, and standardised tests, seeking to influence and determine local policies (Sahlberg, 2005).

The analysis of documents of the projects investigated and the report of the managers of each of those projects show us that, as constitutive elements of centralised national curriculum policies, scenarios, and contexts of curriculum development do not mean, by themselves, homogenisation, after all there are spaces and places for local needs to be placed. However, the existence of several uniformities, including the rationality that underlies how projects predict teachers' participation, reveals more convergence than divergence, express a discursive varnish about "teachers actively participating" in the curriculum development process, allowing spaces of micropolicies with a controlled margin of changes, creating the feeling that it is possible to build "policies from below" (Lessard & Carpentier, 2016, p. 31)

²⁴The Global Educational Movement Reform has been called GERM, elucidating a global infectious scenario, hegemoniser, in local contexts, of educational reforms, which is transmitted like a "virus" to education.

While agreeing with Goodson (2008, p. 169) and recognising that each network, each school has "its own ecology" and teachers are intellectuals who can transform (Giroux, 1997), we question whether the way in which curriculum regulation occurs, mainly through large-scale assessments, accountability policies and *accountability*, are not aggressive enough to make the System something insurmountable to any of us teachers,²⁵ in isolation. Thus, we reaffirm: if participating in mathematics curriculum development processes does not involve Communicative Action and spaces that seek ideals of the Public Sphere, the authorship relationship will hardly materialise.

However, this view requires that the mathematics curriculum is not guided only in terms of learning that, even if not explicitly expressed in the curriculum documents, is consistent with the theory of human capital (OECD, 2007), but also in the language of education and knowledge (Biesta, 2013). The centrality of knowledge, this about the contribution of studies of the sociology of the curriculum, to refer that culture, the social world (and its relations) and the subject are unquestionable assumptions in curricular development and should be the priority, and not a fashionable account²⁶ fulfilling interests, of neoliberal discourses of organisations concerned with the market.

And as Nancy Fraser rightly tells us, recognition must be accompanied by redistribution (Fraser, 2000). And here, we advocate the material redistribution of rights, guarantees, and spaces with equal participation to and of mathematics teachers.

²⁵And never disregarding the implications related to issues of gender, sexuality, race, colour, ethnicity, and so many other expressions of diversity that mark the World of Life of us all. And yet not to mention a whole conjuncture of intersectionalities that can be established. We use teachers including both females and males, but we think of the female teachers, who suffer even more from the forces of the System colonising the World of Life. In fact, many feminists have already written about how the World of Life of women is always very invaded. (Benhabib, 1996).

²⁶As Thiesen (2016) argues, it is a propositional agenda: [...] on a global or transnational scale that in education involves at least four major fronts, namely: a movement for curricular internationalisation; the strategy of curricular centralisation and/or unification at the national and regional levels; the universalisation of large-scale assessments and the strengthening of so-called public-private partnerships in the curricular territory. In general, in the route of political discourse and not infrequently in the texts of the official curriculum policy, they appear fixing meanings around concepts such as efficiency, innovation, and quality (Thiesen, 2016, p. 92). Also in this line, we have Macedo (2019), who considers that there are many political articulations that seek to hegemonise meanings for a quality education; and Frangella and Dias (2018), who criticise the BNCC (National Common Curricular Base) for both the conception of curriculum on which it is based and the role assigned to teachers, stating that it was produced under the hegemony of neoliberal discourse.

ACKNOWLEDGEMENTS

We thank the Fundação de Amparo à Pesquisa do Estado de São Paulo (Fapesp) and the Coordination for the Improvement of Higher Education Personnel (Capes) for their support.

AUTHORSHIP CONTRIBUTION STATEMENT

The main contribution of this article is from the first author, D.A.P, since in this document are part of the results of projects funded under his responsibility, including the post-doctoral studies under the supervision of the second author, J.A.P. The second author, J.A.P., participated in the design of the article, the analysis of the results referring to the Portuguese context, and acting as a post-doctoral supervisor in the development of research to which this article relates. The third author, W.B.L.P, collaborated in the constitution of data from the Brazilian context.

DATA AVAILABILITY STATEMENT

The data supporting the results presented in this article may be made available to interested parties, safeguarding the identities of people participating in the research, upon requests addressed to the first author. Interested parties will also find more research data in Peralta, Pacheco & Neves da Silva (2018); Peralta (2019); Peralta & Pacheco (2021).

REFERENCES

- Adorno, T. W. & Horkheimer, M. (1985). *Dialética do esclarecimento*. Jorge Zahar.
- Austin, J. L. (1962). How to do things with words. Oxford University Press.
- Backes, J. L. (2020). O processo de internacionalização e construção de um currículo cosmopolita: entrevista com Pacheco, J.A.. *Educação Temática Digital*, 22(3), 770-783.
- Benhabib, S. (1996). Models of public space: Hannah Arendt, the liberal tradition, and Jürgen Habermas. In: Calhoun, C. (Ed.). *Habermas and the public sphere*. MIT Press.

- Biesta, G. (2013). Interrupting the politics of learning. *Power and Education*, 5(1), 4-15.
- Bolívar, A. (1999). O lugar da escola na política curricular actual, para além da reestruturação e da descentralização. In: Sarmento, M. J. (Ed). *Autonomia da escola. Políticas e práticas*. Edições ASA.
- Bosco, E. (2017). Habermas e a esfera pública: anotações sobre a trajetória de um conceito. *Revista Sinais*, 21(2), 183-210.
- Brasil. (1988). Constituição Federal. Casa Civil.
- Brasil. (1996). *Lei de Diretrizes e Bases da Educação Nacional* Lei nº. 9394 de 20 de dezembro de 1996. Câmara de Deputados.
- Brasil. (2014). Plano Nacional de Educação 2014. Câmara de Deputados.
- Brasil. (2015). Base Nacional Comum Curricular. Ministério da Educação.
- Charlot, B. (2013). Da Relação com o Saber às Práticas Educativas. Cortez.
- Fernandes, M. R. (2000). *Mudança e inovação na pós-modernidade: Perspectivas curriculares*. Porto Editora.
- Fernandes, P. (2007). O currículo do ensino básico em Portugal na transição para o séc. XXI – um mapeamento de discursos políticos, académicos e de "práticos". Tese de Doutorado, Ciências da Educação, Faculdade de Psicologia e de Ciências da Educação daUniversidade do Porto, Porto.
- Focas, J. D. (2007). Os atos de fala e a ética do discurso. *Língua e Literatura*, 29, 153-175.
- Fraser, N. (1996). Rethinking the public sphere: a contribution to the critique of actually existing democracy. In: Calhoun, Craig (Ed). *Habermas and the public sphere*. MIT Press,.
- Fraser, N. (2000). Rethinking Recognition. New Left Re-view, 3, 107-120.
- Fullan, M. & Hargreaves, A. (2000). *A escola como organização aprendente: Buscando uma educação de qualidade*. Artmed.
- Gadamer, H. (2002). Verdade e método I: traços fundamentais de uma hermenêutica filosófica. Vozes.
- Giroux, H. (1997). Os professores como intelectuais: rumo a uma pedagogia crítica da aprendizagem. Artes Médicas.

- Goodson, I. (2001). *O currículo em mudança: estudos na construção social do currículo*. Porto Editora.
- Goodson, I. (2008). Currículo: teoria e história. Vozes.
- Goodson, I. (2015). *Narrativas em educação: A vida e a voz dos professores*. Porto Editora, 2015.
- Habermas, J. (1984). *Mudança estrutural da esfera pública*. Tempo Brasileiro.
- Habermas, J. (2002). Acções, actos de fala, interacções linguisticamente mediadas e o mundo vivo. In Habermas, J. *Racionalidade e comunicação*. Edições 70.
- Habermas, J. (2004). A ética da discussão e a questão da verdade. Martins Fontes.
- Habermas, J. (2006). Técnica e ciência como ideologia. Edições 70.
- Habermas, J. (2012a). *Teoria do Agir Comunicativo*. Vol 1. Racionalidade da ação e racionalização social. Martins Fontes.
- Habermas, J. (2012b). *Teoria do Agir Comunicativo*. Vol 2. Sobre a crítica da razão funcionalista. São Paulo, Martins Fontes.
- Hokheimer, M. (1980). Teoria Tradicional e Teoria Crítica. Abril Cultural.
- Leite, C., Fernandes, P., & Marinho, P. (2019). Currículo e Avaliação da Aprendizagem: Políticas e Práticas na sua relação com a Melhoria (apresentação). *Linhas Críticas*, 25, 1-5.
- Leite, C. (1997). As palavras mais que os actos? O multiculturalismo no sistema educativo português. Tese de Doutorado, Ciências da Educação, Faculdade de Psicologia e de Ciências da Educação da Universidade do Porto.
- Leite, C. (2002). O currículo e o multiculturalismo no sistema educativo Português. Fundação Calouste Gulbenkian.
- Leite, C. (2003). Para uma escola curricularmente inteligente. Edições ASA.
- Leite, C. (2006). Políticas de currículo em Portugal e (im)possibilidades da escola se assumir como uma instituição curricularmente inteligente. *Currículo sem Fronteiras*, 6(2), 67-81.

- Leite, C. (2019). Políticas de flexibilização do currículo nacional e sua relação com a melhoria. In Morgado, J. C., Carvalho Viana, I., & Pacheco. J.A. (Ed) *Currículo, Inovação e Flexibilização*. (p. 83-94). De Facto Editores.
- Leite, C. & Fernandes, P. (2002). Potencialidades e limites da gestão local do currículo para (e na) construção de uma escola com sentido para todos. In: ME/DEB. *Gestão flexível do currículo: Reflexões de formadores e investigadores*. DEB, 41-62.
- Leite, C. & Fernandes, P. (2010). Desafios aos professores na construção de mudanças educacionais e curriculares: que possibilidades e que constrangimentos? *Educação*, 33(3), 198-204.
- Lessard, C. & Carpentier, A. (2016). *Políticas educativas: a aplicação na prática*. Vozes.
- Losekann, C. (2009). A esfera pública habermasiana, seus principais críticos e as possibilidades do uso deste conceito no contexto brasileiro. *Pensamento Plural*, *4*, 37-57.
- Mead, G. H. (1982). *Espiritu, persona y sociedad: desde el punto de vista del condutismo social*. Paidos.
- Mühl, E. (2003). Filosofia, Educação e Sociedade. Editora da UFP.
- OCDE, & Keeley, B. (2007). Percepciones de la OCDE: Capital humano cómo influye en su vida lo que usted sabe. Ediciones Castillo.
- OCDE. (2018). *The future of education and skills: Education*, 2030. OECD Publishing.
- Pacheco, J. A. (2001). Currículo: teoria e práxis. Porto Editora.
- Pacheco, J. A. (2003). *Políticas curriculares: referenciais para análise*. Artmed.
- Pacheco, J. A. (2008). Organização curricular portuguesa. Porto Editora.
- Pacheco, J. A. (2009). Currículo: entre teorias e métodos. *Cadernos de Pesquisas*, *39*(137), 383-400.
- Pacheco, J. A. (2014). Educação, Formação e Conhecimento. Porto Editora.
- Pacheco, J. A. (2018). Políticas curriculares no período pós-LBSE (1996-2017). Ciclos de mudança na educação pré-escolar e nos ensinos

básico e secundário. In: Pacheco, J.A., Roldão, M. do C., & Estrela, M. T. (Ed). *Estudos de currículo*. (p. 129-176). Porto Editora.

- Pacheco, J. A. (2019). Para uma análise crítica das políticas curriculares no contexto global e no sistema educativo português. In: Tavares Silva, F. de C. & Xavier Filha, C. (Ed.). *Conhecimentos em disputa na base nacional curricular comum.* (p. 43-54). Editora Oeste.
- Pacheco, J. A. (2016). On the Notion of Curricular Transformation. *Cadernos de Pesquisa*, 46(159), 64-77.
- Palanch, W. B. L. & Freitas, A.V. (2018). Políticas Públicas para Educação: A BNCC e os processos de atualização curricular da cidade de São Paulo. In: Vieira Godoy, E., da Silva, M.A. & de Macedo Santos, V.. (Ed.). Currículos de matemática em debate: questões para políticas educacionais e para a pesquisa em Educação Matemática. (p. 147-163). Livraria da Física.
- Peralta, D. A. (2019). *Habermas e as Professoras e Professores de Matemática: vislumbrando oásis*. Appris.
- Peralta, D. A. & Pacheco, J. A. (2021). *Currículo e Avaliação Externa: entre políticas internacionais e práticas nacionais*. Humus.
- Peralta, D. A., Pacheco, J. A. & Neves da Silva, J. R. (2018). A racionalidade subjacente em processos de implantação curricular: um olhar habermasiano sobre relatos de professores de matemática. *Educação em Revista*, 19, 33-52.
- Peralta, D.A. (2017). Formação de professores em contexto de reforma curricular: uma proposta habermasiana em educação matemática. *Revemat: Revista Eletrônica de Educação Matemática*, *12*(1), 63-77.
- Pinar, W., Reynolds, W., Slattery, P., & Taubman, P. (1995). Understanding curriculum: An introduction to the Study of Historical and Contemporary Curriculum Discourses. Peter Lang.
- Portugal. (2008). *Decreto-Lei nº 75/2008 de 22 de abril de 2008*. Aprova o regime de autonomia, administração e gestão dos estabelecimentos públicos da educação pré-escolar e dos ensinos básico e secundário. Ministério da Educação. Diário da República n.º 79/2008.
- Portugal. (2012a). *Decreto-Lei nº 137/2012 de 2 de julho de 2012*. Altera (segunda alteração) o Decreto-Lei 75/2008, de 22 de abril, que aprova o regime jurídico de autonomia, administração e gestão dos

estabelecimentos públicos da educação pré-escolar e dos ensinos básico e secundário, e procede à sua republicação. Ministério da Educação e Ciência. Diário da República n.º 126/2012.

- Portugal. (2012b). Portaria n.º 265/2012, de 30 de agosto. Define as regras e procedimentos a observar quanto à celebração, acompanhamento e avaliação dos contratos de autonomia a celebrar entre os agrupamentos de escolas ou escolas não agrupadas e o Ministério da Educação e Ciência. Ministério da Educação e Ciência. Diário da República n.º 168/2012.
- Portugal. (2017a). *Despacho nº 5908/2017 de 5 de julho de 2017*. Autoriza, em regime de experiência pedagógica, a implementação do projeto de autonomia e flexibilidade curricular dos ensinos básico e secundário, no ano escolar de 2017-2018. Gabinete do Secretário de Estado da Educação. Diário da República n.º 128/2017.
- Portugal. (2017b). Despacho nº 6478/2017 de 26 de julho de 2017. Homologa o Perfil dos Alunos à Saída da Escolaridade Obrigatória. Educação -Gabinete do Secretário de Estado da Educação. Diário da República n.º 143/2017.
- Portugal. (2018a). Despacho nº 6944-A/2018 de 19 de julho de 2018. Homologa as Aprendizagens Essenciais do ensino básico. Educação -Gabinete do Secretário de Estado da Educação. Diário da República n.º 138/2018.
- Portugal. (2018b). *Decreto-Lei nº 55/2018 de 6 de julho de 2018*. Estabelece o currículo dos ensinos básico e secundário e os princípios orientadores da avaliação das aprendizagens. Presidência do Conselho de Ministro. Diário da República n.º 129/2018.
- Roldão, M. C. (2017). Currículo e Aprendizagem efetiva e significativa. In Mathias Alves, J. & Palmeirão, C. (Eds.). *Construir a autonomia e a flexibilização Curricular*. Os desafios da escola e a dos professores. Editora da Universidade Católica.
- Sahlberg, P. (2006). Educational Reform for Raising Economic Competitiveness. *Journal of Educational Change*, 7, 259-287.
- Sahlberg, P. (2011). Finnish Lessons: What Can the World Learn from Educational. Change in Finland? Teachers College Press.

- Sahlberg, P. (2016). Finnish Schools and the Global Education Reform Movement. In Evers, J. & Kneyber, R. (Eds.), *Flip the system – Changing education from the ground up*. Routledge.
- São Paulo. (2020). *Priorização Curricular: Ensino Fundamental*. Secretaria Municipal de Educação. Coordenadoria Pedagógica.
- Silva, F. C. (2001). Habermas e a esfera pública: reconstruindo a história de uma ideia. *Sociologia, Problemas e Práticas*, 35, 117-138.
- Taveira, F. & Peralta, D. (2021). Análise de documentos curriculares de Matemática inspirada na ética discursiva de Jürgen Habermas. Educação Matemática Pesquisa: Revista do Programa de Estudos Pós-Graduados em Educação Matemática, 22(3), 512-537.
- Thiesen, J. S. (2016). A gestão curricular local nas malhas das redes políticas em escala transnacional. *Revista Teias*, 17(47), 91-106.
- Wittgenstein, L. (2000). Investigações filosóficas. Nova Cultural.