Curriculum autonomy policies:

international trends, tensions and transformations

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INTERDISCIPLINARY CENTRE OF SOCIAL SCIENCES

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This book is based on the International Seminar "Curriculum Autonomy Policies in Europe: Trends, Tensions & Transformations", which was held at Gulbenkian Foundation, Lisbon, on January 25 and 26, 2019. Besides including a set of papers that were presented in that context, this publication includes texts from other relevant authors who have conducted research on the topic under discussion – curriculum autonomy. This topic has received attention from many researchers, with different theoretical perspectives.

In the first decades of the 20th century, which were marked by the predominance of a technical perspective, the conceptualization of curriculum autonomy tended to be limited to the idea of adapting the means to the ends, the latter being usually regarded as instrumental to the satisfaction of societal needs. But by the end of the 1960s, when the first wave of re-conceptualization changed Curriculum Studies, such relation between means and ends was questioned, and the idea that curriculum autonomy may also entail the ends became increasingly accepted. Later on, the consolidation of Critical Theory strengthened this tendency, by contesting the assumption that the ultimate aim of curriculum construction should be to fulfill the needs of society, by uncovering relations between curriculum and interests pursued by different sectors of society, and by legitimating emancipatory ways of dealing with the curriculum. Post-critical approaches also reject a conceptualization of curriculum autonomy as permission to perform technical procedures in adapting curricula whose aims are taken for granted. The concept of curriculum autonomy is not even central in the latter approaches, which emphasize that changing the curriculum requires understanding it from multiple perspectives, which emerge from different identities, related to gender, race, sexual orientation, and other factors. Accordingly, for Pinar, Reynolds, Slattery, and Taubman (1995), curriculum change depends on issues of identity and power.

> We want change. However, many degrees of complexity have entered our conceptions of what it means to do curriculum work, to be a curriculum specialist, to work for curriculum change. In general, we are no longer technicians, that is, people who accept unquestioningly others' priorities (p. 6).

This radical view of change challenges researchers to think about autonomy at a crossroads of power relations and influences, rather than regarding it as the mere possibility of making decisions on some aspects of a curriculum whose foundations are taken for granted. Such crossroads are increasingly global.

Since the 1980s, transnational organizations, especially OECD, have increasingly produced knowledge for education policies in general and curriculum policies in particular. The 1980s were marked by the development of curriculum autonomy policies that, due to their induced regulating effect (Justino & Almeida, 2017) in national contexts, have led to the, at least rhetorical, transition from the prescriptive uniform curriculum to a paradigm of curriculum autonomy (OECD, 1994, 1998).

This new nationwide paradigm, justified in part by the heterogeneity of the population that the universalization of primary and secondary education has brought to schools in democratic societies, has accentuated the need for both curriculum autonomy in national contexts at the meso or local scales (municipalities, schools, and teachers) and a common core curriculum embodied in the so-called national curricula or core curriculum (OECD, 1994).

From the 1980s onwards, national curricula have been implemented all over Europe. However, their reality is very different in countries with a centralist tradition or in countries with historical paths marked by great local autonomy. In traditionally centralising countries, the "national" curriculum was, from the outset, the only one that existed, although it did not have that designation. The novelty in these contexts is the supposed curriculum autonomy of schools and teachers. By contrast,

> in countries with great local autonomy, like the Nordic and Anglo-Saxon countries, the opposite is true: the national curriculum emerges as a regulating factor common to the traditional diversity of options schools could choose from, which were normatized only by external assessments, and therefore appearing as more restraining to schools. (Roldão & Almeida, 2018, p. 13).

Studies have demonstrated that curriculum autonomy policies limit the agency of schools and teachers (Priestley, Biesta & Robinson, 2013) through both input regulation (prescription of content, methods and/or teaching materials) and output regulation (e.g., school inspections or national exams) (Biesta, 2004, 2010; Priestley & Philippou, 2018; Wilkins, 2011).

As stressed by Kuiper and Berkvens (2013), regarding specifically the European setting, although curriculum autonomy has become a catchphrase for education policies, highly prescriptive curriculum policies are still dominant, while other forms of regulation find their place in other systems.

> Decentralisation and autonomy are the most common words when we are talking about curriculum freedom. [...] However, Europe shows a wide variety in curriculum regulation and freedom. Some countries have a strong input regulation through highly prescriptive curricula, others use output regulation through tests/exams and inspectorate, others emphasize deregulation by affording schools and teachers space for local curricular decision-making, and others have some sort of a mixture of the above. (Kuiper & Berkvens, 2013, p. 5).

More recently, studies have shown the emergence of a "new curriculum" (Priestley & Biesta, 2013), which means later variants of national curriculum commonplace around the world. These

"new curricula" have tended to neglect the specification of content, emphasising instead the importance of the development of skills and the autonomy of schools and teachers in making the curriculum, in a rhetorical sense at least. Such curricula have become associated with certain problems – lack of attention to knowledge, enactment problems – such as the lack of sense-making by teachers or strategic/superficial compliance (Priestley, Biesta, & Robinson, 2015).

This has been associated with the presence of ideas of decentralisation of governance and actively including citizens in decision-making processes in the discourse of public sector 'reform' in most European countries (Verger & Curran, 2014). This policy direction can, amongst other things, enhance 'stakeholder' voice and choice (Brown et al., 2016). The development of participatory approaches to governance, curriculum development, school evaluation, and other educational processes, while conceptually robust, also presents many challenges such as resistance, objections, and drawbacks to parent and student voice in schools (Brown et al., 2020). This has been visible in the participatory design of school buildings (Könings et al., 2017), for example, but also in processes like schools' self-evaluation and planning (Brown et al., 2021). In the context of curricula, there is growing evidence of the importance of the empowerment of teachers in the design process (Cober et al., 2015; Kali et al., 2015).

Curriculum Studies are familiar with the idea of teachers designing curricula. From Taba (1962), advocating that curriculum development should be a bottom-up process with teachers in central roles for development and leadership, to Schwab (1978) and Stenhouse (1987), strongly advocating the role of the teacher in making curriculum decisions, with the latter putting forward the idea of a teacher-as-researcher, there are early examples of recognition of a central role to be played by teachers. Critical and post-critical theories have emphasized the importance of emancipation, as we have already mentioned, and called for the participation of teachers and other actors in decision-making beyond practice, including decisions related to curriculum policy. Overall, Curriculum Studies have increasingly highlighted that the necessary awareness and reflection should be shared and participated by teachers, students, leaders, and stakeholders.

The long tradition of teacher involvement in curriculum design has encountered various problems (Huizinga et al., 2014) and is currently battling the elusive and erosive instance of autonomy that recent educational reforms and policies brought with them (Priestley & Philippou, 2018). The chapters in this book address several of these issues and challenges from varying national and theoretical perspectives.

In the first section, 'Curriculum and knowledge', four chapters develop themes related to the reconceptualization of knowledge, curriculum integration, policies and practices.

Michael Young outlines the history of the field of Sociology of Education, especially its development in England, with reference to the work of Basil Bernstein and his major contribution to this subdiscipline. Bernstein criticized the first two moments in the development of Sociology of Education: the theories of reproduction and the New Sociology of Education. The first theories positioned educational inequalities in society rather than in the educational system. These theories were very deterministic and treated teachers as having a passive role. The New Sociology of Education connected the critique of the social class basis of existing educational

provision to a sociological analysis of the prevailing system focused on curriculum, pedagogy, ability and related topics. Despite its anti-deterministic approach, and the importance it assigned to teachers' potential for change within and outside schools, it had limitations. Young highlights these by putting forward Bernstein's great contribution of distinguishing between what is relayed by education – the social class inequalities – and the content of the 'relay' itself. For Young, what is still lacking in the theories of reproduction that dominated and still dominate much of the Sociology of Education is an analysis of the pedagogical discourse (curriculum and pedagogy, for Bernstein) or the "pedagogization" of the curriculum. Given the new emphasis on knowledge not only in the Sociology of Education but also in Curriculum Studies, theory and policy, transmission has become a key issue, but it needs further discussion.

Sílvia de Almeida develops a socio-historical analysis of curriculum policies expressed in curriculum reforms or reorganisations concerning elementar education that have incorporated dimensions and modalities of curriculum integration in Portugal since Roberto Carneiro's Curriculum Reform (1989-1990) until the recent curriculum flexibility policies (2016-2018). One of the main questions that curriculum theory has raised is how to organize the curriculum selection related to the knowledge and culture of a given society. From the 1990s onwards, and with the recent European curriculum autonomy policies, curriculum integration has increasingly included the agendas of curriculum policies. The author concludes that curriculum integration exists mainly in two dimensions: (a) for formative dimensions, i.e., 'social integration', and (b) towards the connection between subjects, i.e., 'integration of knowledge'. These two dimensions are often associated either with each other or with the different curriculum solutions found. The areas of the 'integration of knowledge' dimension have characterised the Roberto Carneiro Reform from the outset, but their implementation has been very deficient. One of the obstacles to this dimension of curriculum integration is the link between the so-called integrating areas and the subjects with a mobilisation rather than an addition rationale – an aspect that, in the Portuguese case, stems largely from the difficulty of the subject-based organisational structure to accommodate these areas of curriculum. This is partly due to the fact that the integrating areas are conceived in the curriculum separate of subject areas as if the integration of knowledge had its own curriculum space standing apart from the subjects. Only the curriculum reorganisation created by the recent curriculum autonomy policies (2016-2018) has unblushingly reversed this rationale, establishing the 'integration of knowledge' in the 'sacred' space of traditional academic subjects.

The chapter by Maria Figueiredo discusses knowledge in teaching practices in Portuguese Early Childhood Education. By presenting teaching as encompassing different dimensions – organization of the educational environment and interactions – the author argues that deep and flexible content knowledge is needed for Early Childhood Teachers. Even if the role of the content is contentious when teaching is discussed in this context, recent research reveals the relevance of knowledge that permeates the social and material contexts of childhood. The same importance has been signaled for interactions between adults and children about content for expanding children's knowledge and their metacognitive awareness of learning. The chapter then moves the discussion to the Portuguese curricular context, comparing the two versions of the curricular guidelines and discussing data from a national project about curriculum and assessment. The results stress the urgency of making content knowledge visible in the context and in children's play. When the specificity of teaching and content in Early Childhood Education are not highlighted,

the author concludes, formal practices, mimicked from higher levels of education, are felt as needed. This leads to practices with less quality and a loss of pedagogical richness.

José A. Pacheco, Joana Sousa, Ila Beatriz Maia, and Sofia Rodrigues analyze the historical moment of the curriculum field, by discussing issues of knowledge and their relation to the hypothetical end of the crisis in that same field. The authors reflect on the knowledge needed to answer different and divergent questions in a globalized society. Accountability and performativity are two central concepts, also relevant for curriculum policies and curriculum practices. The authors conclude that globalization is creating modes of governance (politics) and governmentality (actors), by imposing accountability processes and performativity practices on education and curriculum. The global policies are moving the curriculum construction from the national to the transnational level. These changes do not occur only at the level of the intended curriculum or at the level of knowledge. The political governance intersects directly as teachers, students and parents look at the classroom, increasingly seen as a political arena of quantitative results, limited to testing, and to training the academic performance production techniques. The authors argue that the classroom becomes a technical space and assessment machinery and not a space for education. It is a piece of machinery driven by market logic, based on the idea that the schools produce winners and losers, like the broad society.

The second section, 'Curriculum Policies', includes two contributions that delve into the social construction of the curriculum and the curriculum of secondary school education.

Pedro Abrantes compares the key landmarks of the curriculum reforms that took place in two countries – Portugal and Spain –, from 1970 to 2005, the core period of political democratization and European integration in both countries, from a socio-historical perspective. The analysis focused on two main curriculum frames: the organisation of different educational stages and the degree of (regional and school) autonomy. In spite of many similarities between both education systems, there were considerable differences in the way the different educational stages were re-configured during this stage, as well as in the process of conceiving and implementing curriculum autonomy. The author concludes that the (re)definition of educational stages and the conception/degree of curriculum autonomy are two key elements to frame curriculum development, and therefore a core issue of education policy debates, in the context of power relations between multiple groups and classes in modern societies.

Menga Lüdke and Felipe Ferreira analyze the curriculum policies regarding secondary school in Brazil, from which students follow into higher education or professional activities. The challenge of combining the two fundamental orientations, preparation for the academic environment and professional life, has long been identified by scholars and policymakers in Brazil. According to the authors, different solutions have been tested, like the Integrated Secondary since 2004 in many schools across the country. The chapter presents part of the evolution of secondary school to frame a discussion about the experience of the new integrated modality. As the idea of a secondary school that sought to integrate the two basic functions began to be tested in some schools, scholars unveiled its challenges and debated its problems intensely. The authors present the debate in Brazil, which is characterized by old impasses surfaced between what was understood as general secondary school education and what was characterized as technical secondary school, a branch of professional education. Heated debates, combining

political and pedagogical arguments, not always with a necessary balance, crossed the late 20th century into the 21st century, accompanying government initiatives, not always welcomed by teachers and researchers committed to finding solutions to address well-known problems.

Finally, the third section, 'Participatory curriculum design', introduces three contributions related to curricular autonomy, the participation of teachers in curricular design and the concept of curricular relevance.

Francisco Sousa relates curricular autonomy to the concept of relevance, based on the assumption that making autonomous decisions about the curriculum, rather than simply following curriculum guidelines issued by educational authorities, is likely to increase the acknowledgment of curriculum relevance. Considering that the conceptualization of curriculum relevance is rare in the literature, this chapter proposes a model that might facilitate the work of researchers and decision-makers.

Sílvia de Almeida, Joana Viana, Natália Barcelos, Maria do Céu Roldão, and Helena Peralta focus on the unprecedented invitation addressed in 2016 by the Portuguese Ministry of Education to teachers' associations to participate in the process of defining the curriculum at a macro level – the Essential Learning. This chapter explores the dynamics of interaction between teachers' associations in the same subject area and the difficulties felt by the participants. Such difficulties are related to the tradition of individual work by Portuguese teachers and to the multiplicity of official – and sometimes contradictory – curriculum documents produced for over thirty years in Portugal. During that period, the situation of the curriculum documents in Portugal became a mosaic that lost its unity. This study has shown the importance of teachers working collaboratively and being involved at every stage of curriculum development – not only in its implementation but also in deciding about it at the macro-level, especially when the official curriculum results from policies that aim to develop curricular integration in schools.

This section ends with a contribution from Ana Cristina Câmara and Emília Sande Lemos, on behalf of the Geography Teachers Association, from Portugal, about the design of the core curriculum for Geography (Essential Learning), by setting out what is essential to learn in Geography and the competences for the 12 years of compulsory schooling. The authors present the references used for the model of Essential Learning in the particular subject area and the collaborative work that was developed. The model resulted from an approach based on curricular integration, in which connections between different sources of knowledge are sought. It was also based on an analysis of curricular documents from other countries, documents from international organizations, and recent curricular documents from Portugal. The text highlights how to promote systematic debate – with the participation of teachers, parents, and other actors in schools and other educational institutions –, how to monitor schools, and to strengthen teacher education, in order to obtain real feedback about the implementation and about the educational and scientific value of the Essential Learning.

This book confirms that curriculum autonomy is a complex topic, for various reasons, including reasons related to its conceptualization at the theoretical level, its relative importance in different political agendas, and its connection with other educational topics, some of which are especially critical. Teachers' identity and professional development is one of them, inasmuch as political initiatives related to curriculum autonomy cannot survive without teachers' commitment. This book

shows that effective participation of teachers in decisions related to the curriculum is possible. It also shows different ways of supporting curriculum autonomy. Furthermore, it might help readers understand curriculum autonomy at the theoretical level. In short, although it is not exhaustive, it covers a wide range of perspectives, thus contributing to the ongoing debates about the topic.

References

Biesta, G. J. (2004). Education, accountability and the ethical demand. Can the democratic potential of accountability be regained? *Educational Theory*, 54, 233–250.

Biesta, G. J. (2010). *Good education in an age of measurement: Ethics, politics, democracy*. Paradigm Publishers.

Brown, M., **McNamara**, G. & **O'Hara**, J. (2016). Quality and the rise of value-added in education: The case of Ireland. *Policy Futures in Education*, 14(6), 810–829.

Brown, M., **McNamara**, G., **Cinkir**, S., **Fadar**, J., **Figueiredo**, M., **Vanhoof**, J., **O'Hara**, J., **Skerritt**, C., **O'Brien**, S., **Kurum**, G., **Ramalho**, H. & **Rocha**, J. (2021). Exploring parent and student engagement in school self-evaluation in four European countries. *European Educational Research Journal*, 20(2), 159-175.

Brown, M., **McNamara**, G., **O'Brien**, S., **Skerritt**, C. & **O'Hara**, J. (2020). Policy and practice: including parents and students in school self-evaluation. *Irish Educational Studies*, 39(4), 511-534.

Cober, R., **Tan**, E., **Slotta**, J. D., **So**, H. & **Könings**, K. D. (2015). Teachers as participatory designers: Two case studies with technology-enhanced learning environments. *Instructional Science*, 43, 203–228.

Huizinga, T., **Handelzalts**, A., **Nieveen**, N. & **Voogt**, J. M. (2014). Teacher involvement in curriculum design: Need for supp ort to enhance teachers' design expertise. *Journal of Curriculum Studies*, 46(1), 33–57.

Justino, D. & **Almeida**, S. (2017). International assessment, curriculum policy induction and instruction time management: lessons from Portuguese experience. *European Journal of Curriculum Studies*, 4(2), 671-691.

Kali, Y., **McKenney**, S. & **Sagy**, O. (2015). Teachers as designers of technology enhanced learning. *Instructional Science*, 43, 173–179.

Könings, K. D., **Bovill**, C. & **Woolner**, P. (2017). Towards an interdisciplinary model of practice for participatory building design in education. *European Journal of Education*, 52(3), 306–317.

Kuiper, W. & **Berkvens**, J. (Eds.) (2013). *Balancing curriculum regulation and freedom across Europe*. SLO.

OECD (1994). *The curriculum redefined: schooling for the 21st century.* OECD/CERI.

OECD (1998). *Making the curriculum work*. OECD/CERI.

Pinar, W., **Reynolds**, W., **Slattery**, P. & **Taubman**, P. (1995). *Understanding curriculum: An introduction to the study of historical and contemporary curriculum discourse*s. Peter Lang.

Priestley, M. & **Biesta**, G.J. (Eds.) (2013). *Reinventing the Curriculum: New Trends in Curriculum Policy and Practic*e. Bloomsbury Academic.

Priestley, M. & **Philippou**, S. (2018). Curriculum making as social practice: complex webs of enactment. *The Curriculum Journal*, 29(2), 151-158.

Priestley, M., **Biesta**, G.J. & **Robinson**, S. (2013). Teachers as agents of change: teacher agency and emerging models of curriculum. In M. Priestley, & G. J. Biesta (Eds.), *Reinventing the curriculum: new trends in curriculum policy and practice* (pp. 187-206). Bloomsbury Academic.

Priestley, M. **Biesta**, G. J. & **Robinson**, S. (2015). *Teacher Agency: An Ecological Approach*. Bloomsbury Academic.

Roldão, M. C. & **Almeida**, S. (2018). Curriculum contextualization in a network of Portuguese schools: a promise or a missed opportunity? *Estudos em Avaliação Educacional*, 29(70), 8-45.

Schwab, J. J. (1978). The practical: A language for curriculum. In I. Westbury & N. Wilkoff (Eds.), *Joseph J. Schwab. Science, curriculum, and liberal education: Selected essays* (pp. 287–321). University of Chicago Press.

Stenhouse, L. (1987). *Investigación y desarrolo del curriculum* (A. Miralles, Trad.; 2nd ed.). Ediciones Morata (original 1975).

Taba, H. (1962). *Curriculum development: Theory and practice*. Harcourt Brace.

Verger, A. & **Curran**, M. (2014). New public management as a global education policy: Its adoption and recontextualization in a Southern European setting. *Critical Studies in Education, 55*(3), 253–271.

Wilkins, C. (2011). Professionalism and the post-performative teacher: New teachers reflect on autonomy and accountability in the English school system. *Professional Development in Education, 37*, 389–409.

Young, M. F. (1971). *Knowledge and control. A New directions for the sociology of education*. Collier-Macmillan.

1.

Curriculum and Knowledge

Knowledge, curriculum and the sociology of education

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ABSTRACT
Early work in the field of Sociology of Education was dominated by the reproduction theory, which has been criticized both by the New Sociology of Education and by Basil Bernstein, for its deterministic approach, that is, for its tendency to treat schools as 'black boxes', with a merely instrumental role in the maintenance of social inequalities. Rather than assuming that inequality in schools is simply imposed from the outside, it is necessary to analyse the internal mechanisms of pedagogical practice that might contribute to it. It is also necessary to acknowledge students as members of 'communities of enquiry' and to focus on the 'pedagogisation' of the curriculum by teachers, rather than equating knowledge transmission with memorization.

KEYWORDS
Sociology of education, knowledge, curriculum.

1. Sociology of Education: The historical and international context

The question of knowledge and what knowledge students have a right to gain access to during their schooling has become a policy as well as a research issue in recent years. However, although the question of knowledge might appear to be an obvious topic for the Sociology of Education, with the recent and notable exception of the English sociologist, Basil Bernstein, and those, such as Rob Moore and Johan Muller, who have followed in his footsteps, it has been largely neglected. Furthermore, when a sociological approach has been directed to policy or practice, it has turned out to raise far more difficult questions than Governments or teachers are able to deal with. This paper does not go into detail concerning the current debate around the idea of 'powerful knowledge', however I thought a brief account of the history and context of the sub-discipline as it has developed in England, would be useful to readers, together with some reference to the important work of Basil Bernstein. It was he, after all following the critical reception of his early work on linguistic codes who first argued that knowledge, or as it is sometimes expressed 'the stuff' and not just' the who' of education was crucial to any serious

debate. A detailed discussion of contemporary debates is something I would be happy to undertake in a later paper.

2. Sociology and the Sociology of Education – the beginning

Sociology of Education has a history almost as old as Sociology itself – initially in France. The term was invented by Comte but the discipline only really took off through the work of Emile Durkheim, mostly in the first decade of the 20th Century. Durkheim was never a Professor of Sociology. However, he saw education not as a set of phenomena to which Sociology could be applied but as central to his theory of modern society and how it was changing.

I do not read French well enough to know why Durkheim's work, despite the debt to him that Bourdieu acknowledged, has not had the influence in France that one might have expected. The celebration in France, of centenary of his death in 2017 which I had been privileged to be invited to contribute to, did not materialize – something to do with divisions within the French academic community, I understand.

The other country where Sociology of Education has had an almost as long but very different history was in the United States of America. Initially it was established at the University of Chicago. There it was interpreted as an extension of GH Mead's symbolic interactionism and developed by Howard Becker in his famous studies of school teachers and medical students. At Harvard, Durkheim was interpreted very differently by Talcott Parsons who like Durkheim saw education as integral to his theory of society. However, with two exceptions – Aaron Cicourel and John Kitsuse's *The Educational Decision Makers* in the 1960's and half a century later, David Baker's *The Schooled Society* –, Sociology of Education never really developed as a distinct specialism within either educational studies or Sociology. Lastly there is the English Language tradition that I have been associated with and is the main topic of this paper. An important point is that while it began in England, it is no longer English in the narrow sense – flourishing variants of it can be found in other English speaking countries such as Australia, New Zealand and South Africa.

3. Sociology of Education in England – early beginings

Like Sociology itself, Sociology of Education was almost entirely a post-World War 2 development in England. Karl Mannheim was the first Professor in 1946, appointed to the University of London's Institute of Education; however, he died after a year in post and it did not emerge in England until the 1950's when it grew out of the demographic studies undertaken by David Glass at the London School of Economics. Jean Floud and AH Halsey extended Glass's findings and focused on the social class basis of educational inequalities. Their research showed how our system of selection for grammar schools at 11+ and the IQ tests of Cyril Burt masked the extent to which the selection was based on social class. It was not until 1960's that Basil Bernstein became our second Professor of Sociology of Education at the Institute of Education. Bernstein's early work extended Floud and Halsey's focus on selection through his sociolinguistic studies but he became established as leader of the discipline following his keynote address to the

British Sociological Association in 1970. This was published later as one of his most well known papers – *The classification and framing of educational knowledge* (Bernstein, 1971).

It was the earlier revelations of the social class basis of educational inequality that established the Sociology of Education as a distinct field and led to two developments in the 1970's – both were attempts to explain and more ambitiously to overcome educational inequalities. The first attempt were the cultural and social reproduction theories of Bourdieu, Althusser and the American economists Bowles and Gintis. They located the persistence of educational inequalities in the society rather than in the educational system; Althusser and Bowles and Gintis assumed that overcoming them would depend on class struggle in the Marxist sense. However their ideas were interpreted in a highly deterministic way, and treated teachers as having an essentially passive and conservative role and likely to resist any revolutionary change.

4. Knowledge and Control and the 'New Sociology of Education'

The second development which became known as the New Sociology of Education (NSOE) which developed from my book *Knowledge and Control* (Young, 1971) combined a critique of the social class basis of existing educational provision with a sociological analysis of the prevailing system and its dominant categories such as curriculum, pedagogy and ability. Its anti-determinist approach linked an analysis of the radical potential of the classroom practice of teachers with the struggles of other subordinate groups such as trade unionists and argued that together they could be potential agents of change within schools and beyond. This argument was put in two books that I edited with Geoff Whitty (Whitty & Young, 1976; Young & Whitty, 1977); their titles were *Explorations in the Politics of School Knowledge and Society, State and Schooling.* The election of a right wing Conservative Government in 1979 put an end to the over-optimistic hopes expressed in these books. A result was the fragmentation of Sociology of Education which has remained with us to this day.

5. Basil Bernstein's critique and the concept of relay

It was the failure of the earlier traditions – reproduction theory and the NSOE – to offer an adequate analysis of educational inequalities in the new phase of neo-liberal capitalism that concerned Bernstein. He distanced himself from both – most sharply from the NSOE despite his initial support – and developed a framework for an alternative approach which was little noticed at the time. His analysis focussed primarily on the dominant reproduction theories of Bourdieu (1973), Bowles and Gintis (1976) and Althusser (1970) and set out to show "what such theories and approaches presuppose, what is not addressed, and, perhaps inadvertently, what cannot be addressed as a consequence of the form these reproduction theories take" (Bernstein, 1990, p. 168).

Bernstein set himself two tasks:

- to describe the presuppositions of the reproduction theories he was criticizing, and
- to link what they do not discuss to the form they take.

His critique of the NSOE which later in the USA became the critical pedagogy tradition which was inspired initially by Michael Apple's *Ideology and Curriculum* (Apple, 1976) was not straightforward. He shared their concern with the unequal distribution of educational opportunities, but not with how they explained it. What the NSOE did was to challenge and question prevailing practices, and problematize the nature of knowledge and its transmission, acquisition and evaluation in schools. In other words it focused directly on the internal operation of the schools themselves through an analysis of the 'curricular, pedagogic and assessment categories held by school personnel, the teacher-student interactions, and above all, the curriculum'.

However critique is not the same as explanation. The NSOE assumed that somehow criticising a social phenomenon would lead to its inevitable collapse – a form of idealism that denies any real forces in society that have to be identified and struggled against. Bernstein's criticism of my book *Knowledge and Control* (Young, 1971) (despite supporting its publication and having his paper included in it!) and the NSOE that it led to was that my position was just critique and I did not undertake any "systematic account of the distinguishing feature of schooling – the transmission and acquisition of knowledge" (Bernstein, 1990). On reflection, I think he was right, but the reason for this failure was that to develop a theory of schooling and the transmission of knowledge was an extremely difficult and ambitious task. Furthermore, there were no potential theories available at the time, except Marxism which had been developed in an earlier phase of capitalism that preceded the emergence of mass education and the growth of the state.

In relation to cultural reproduction theories like that of Bourdieu, Bernstein's approach was different and he is sometimes assumed to have himself adopted a similar approach. However, Bernstein worked on the issue of the reproductive role of education from a very different direction to Bourdieu. He argued that what reproduction theory set out to do was to show how existing structures of education, to quote him, "legitimated the assumptions of the prevailing culture and disguised the power relations which they transmit through the exercise of symbolic violence" (Bernstein, 1990) – to use Bourdieu's term.

However, for Bernstein this does little more than describe and at best 'diagnose' education as a 'pathological device' (something bad) and the school as 'a site of this pathology'. In other words it treats schooling as a kind of 'social disease'. This he argued specifies education as a form of 'distorted communication' but fails to describe what a 'non-pathological' or un-distorted form' might involve.

How did he suggest reproduction theory did this?

- By privileging the interests of a dominant group, in their analysis and by
- underestimating and misrepresenting the 'culture, practice and consciousness of the dominated groups'. (Bernstein, 1990).

Bernstein's argument was that 'theories of cultural reproduction lack an explicit theory of communication' which they take for granted. This means they cannot generate possible alternative approaches to pedagogy and curriculum. The reason is that theories of cultural reproduction view education as a carrier of power relations external to education – this is the key point that I

take from Bernstein. In other words education is treated as 'an amplifier of certain features and relations of the culture for the purpose of the legitimating social class relations. Thus it is a vacuum which has no internal structures, forms and rules.

As a consequence of this emptiness of education in reproduction theory it approaches education from the outside rather than the inside. It focuses on how external power relations are carried by the system of education rather than by the internal principles that regulate pedagogic practice. Education remains a 'black box' and the perennial problem of the failure of such systems to educate the majority of students remains unexplained.

Bernstein's original insight is expressed in the distinction he makes between what is relayed by education – for example social class inequalities – and the content of the 'relay' itself.

From point of view of the cultural reproduction theories, pedagogic discourse (his term for curriculum and pedagogy) is itself no more than a relay for power relations external to itself and has no consequences for what is relayed.

In contrast as Bernstein argues, 'it is the structure and logic of the (pedagogic) discourse which provides the means whereby external power relations can be carried by it' (Bernstein, 2000, p. 3). Unfortunately, what is absent in reproduction theories which have dominated and still do dominate much Sociology of Education, is an internal analysis of the structure of the relay itself – pedagogic discourse.

Bernstein argued that there is an 'overwhelming similarity' of the intrinsic rules that account for all educational systems and education practices, no matter how different they appear to be from one society to another. Furthermore, these rules are stable over long periods of time. This is a point that has been made recently by the American sociologist of education David Baker in his book *The Schooled Society* (2014).

Because of their overwhelming similarity and relative stability, it is possible to establish a theory of the internal logic of pedagogic discourse that is 'independent of the dominant ideology' (Bernstein, 2000, p. 170). It may explain why, as I recently did, one can go to China and present ideas about knowledge and the curriculum and they can recognise them as not the same but similar to the expanding system in China – despite our vastly different histories.

6. Boundary as sociology of education's 'deep metaphor'

In his last book *Pedagogy, Symbolic Control and Identity* (Bernstein, 2000), Bernstein developed a criterion for the theoretical work in Sociology of Education. It was that it should start with 'a metaphor operating at a deep level'. Without a deep metaphor, there is no way in which the Sociology of Education can describe the distinctive features and practices which constitute the school or how they change. The deep metaphor for Bernstein which can be traced back to the influence on him of Durkheim's work on religion is 'boundary' (inside/outside, intimacy/distance, here/there, near/far, us/them).

It is this idea of boundary as the deep metaphor for describing education in capitalist society that I think is Bernstein's most lasting and unique contribution to Sociology of Education and has shaped my thinking implicitly and explicitly in the last decade. It is expressed in how I have approached the curriculum and come to see it as the central problematic for Sociology of Education. It points to but has not yet adequately conceptualised what I see as one of Sociology of Education's core theoretical issues. I express this in the following question: 'how is knowledge that is inherited from the past and developed by research and scholarship, re-contextualised as subjects that are transmitted by the pedagogy of teachers?'

Bernstein's work proposes the task for the Sociology of Education as a key component of the broader aims of the Sociology of Knowledge and its project to explain the relationship between:

- the production of new knowledge though research and scholarship in academic disciplines and
- the recontextualization of this knowledge as academic subjects transmitted by teachers in schools.

The first issue – the production of knowledge – has historically been separated as the Sociology of Knowledge and its sub-fields, the sociologies of science, literature, history, etc. This has, arguably in a misguided way, completely separated the production and transmission of knowledge into two specialisations – Sociology of Knowledge and Sociology of Education.

The second issue – the recontextualization of disciplinary knowledge as school subjects – has been the focus of my recent work since 2007 and the publication of my book *Bringing Knowledge Back In* and the books of Rob Moore at the University of Cambridge and Johan Muller at the University of Cape Town in South Africa. However, despite the influence of Bernstein, this work has tended to treat the recontextualization of disciplinary knowledge as separate from its transmission by teachers and focus only on the stipulation of knowledge in curricula. Unless the theory of knowledge focuses also on the process of transmission, the 'acquisition of knowledge' can become, for students in many schools with a knowledge-led curriculum in England, little more than the memorization of bits of information, as if the minds of students were computers. The 'pedagogisation' of the curriculum by teachers is as important as its recontextualisation from disciplines if its acquisition is to enable students to develop a 'relationship to knowledge' and become neophyte members of communities of subject specialists.

7. Reconceptualising the transmission of knowledge; first steps

As a consequence of the new emphasis on knowledge not only in the Sociology of Education but in curriculum theory and policy, the issue of transmission has become a key, but neglected and largely un-theorised issue. It is either avoided, taken for granted or equated with memorisation when it needs to be analysed as a social process involving the relations that teachers develop with their students. It has come to be at the centre of my current concerns. If we leave pedagogic practice un-theorised and un-explained, we are back with the un-resolved issues of

reproduction theory identified by Bernstein of how and why societies which start with the principle of 'equal access to knowledge for all' distribute knowledge and educability so unequally.

We have to begin with the distinction between memorisation of knowledge which is close to the idea of consumption, and developing a relationship to knowledge which has more affinity with becoming a member of a community. This requires us to recognise the two distinct meanings of a school subject or academic discipline. Both are bodies of related concepts, and rules for investigating their object of enquiry. However it also requires us to see such bodies of knowledge as communities of enquirers' (to use a phrase used by the American philosopher CS Pierce). What follows is a theory of curriculum which posits students as becoming members, initially a very junior members, of a range of subjects as 'communities of enquiry' within which they engage with teachers and senior students as more knowledgeable members. This points to a new programme of research for sociologists of education, not as individual specialists but as specialists collaborating with subject and disciplinary specialists. It also implies a new approach to the initial and further professional development of teachers becoming subject specialists[1].

References

Althusser, L. (1970). *Lenin and Philosophy*. Verso Books.

Apple, M. (1976). *Ideology and Curriculum*. Routledge.

Baker, D. (2014). *The Schooled Society.* Stanford University Press.

Bernstein, B. (1971). *Class, Codes and Control Vol 1.* Routledge.

Bernstein, B. (1990). *Class, Codes and Control Vol 4*. Routledge.

Bernstein. B. (2000). *Pedagogy, Symbolic Control and Identity*. Routledge

Bourdieu, P. & **Passeron**, J. C. (1973). *Cultural reproduction and social reproduction*. Routledge.

Bowles, S. & **Gintis**, H. (1976). *Schooling in Capitalist America*. Basic Books.

Cicourel, A. & **Kitsuse**, J. (1963). *The Educational Decision Makers*. Bobbs Merrill.

Floud, J., **Halsey**, A. H. & **Martin**, F. (1957). Social class and educational opportunity. *British Journal of Educational Studies, 6*(1), 80-81.

Glass, D. (1954). *Social Mobility in Britain*. Routledge.

Moore, R. (2004). *Education and Society*. Polity Press.

Muller, J. (2000). *Reclaiming Knowledge*. Routledge.

Whitty, G. & **Young**, M. (Eds.) (1976). *Explorations in the politics of School Knowledge*. Studies in Education.

Young, M. F. (1971). *Knowledge and control. New directions for the sociology of education*. Collier-Macmillan.

Young, M. & **Whitty**, G. (Eds.) (1977). *Society, State and Schooling*. Falmer Press.

Young, M. (2007). *Bringing Knowledge Back In*. Routledge.

[1] Two initiatives that pick up some of these issues are the Specialist Subject Research Group at the UCL Institute of education and the ROSE Project at the University of Karlsbad in Sweden. These groups are currently collaborating on a COST Partnership concerned with the application of the concepts **of epistemic quality** and **powerful knowledge**. Both in relation to the initial education of teachers and to the secondary curriculum.

Knowledge and curriculum. Curriculum integration in Portugal – a socio-historical approach

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ABSTRACT

From the 1990s onwards, and with the recent European curriculum autonomy policies, curriculum integration has increasingly been included into curriculum policy agendas. The dimensions of curriculum integration were conceived from the origin of curriculum theory. However, it would fall upon the Sociology of Education in England to develop one of the most detailed analyses of the concept in the 1970s (Beane, 1997). Michael Young (1971, 1998) and Basil Bernstein (1971, 2003) analysed the implications of organising the curriculum according to isolated subjects and ended up suggesting the concept of curriculum integration. We start by asking two key questions: How have curriculum policies in Portugal introduced dimensions and modalities of curriculum integration? How effective are these policies when implemented in schools? This chapter aims to provide a socio-historical analysis of curriculum policies expressed in curriculum reforms or reorganisations concerning elementar education that have incorporated dimensions of curriculum integration in Portugal since Roberto Carneiro's Curriculum Reform (1989-1990) to the current curriculum flexibility policies (2016-2018). We have favoured a qualitative methodology based on the documentary analysis of curriculum policy regulations and evaluation studies of the respective policies. We have found that curriculum integration exists mainly in two dimensions: (a) for formative dimensions, i.e., 'social integration', and (b) towards the connection between subjects, i.e., 'integration of knowledge'. These two dimensions are often associated either with each other or with the different curriculum solutions found. The areas of the 'integration of knowledge' dimension have characterised the Roberto Carneiro Reform from the outset, but their implementation has been very deficient. One of the obstacles to this dimension of curriculum integration is the link between the so-called integrating areas and the subjects with a mobilisation rather than an addition rationale – an aspect that, in the Portuguese case, stems largely from the difficulty of the subject-based organisational structure to accommodate these areas of curriculum. This is partly due to the fact that the integrating areas are conceived in the curriculum separate of subject areas as if the integration of knowledge had its own curriculum space standing apart from the subjects. The curriculum reorganisation created by the recent curriculum autonomy policies (2016-2018) has unblushingly reversed this rationale, establishing the 'integration of knowledge' in the 'sacred' space of traditional academic subjects.

KEYWORDS
Curriculum policy; curriculum knowledge; curriculum integration; sociology of education; critical curriculum theory.

Introduction

Dealing with curriculum integration matters has gained traction after the movements for the universalisation of education in the post-war period, particularly following the implementation of unification and comprehensiveness policies that stirred the need for the curriculum to be also an instrument of integration and use of knowledge that was not exhausted in the academic domain of separate subjects that had largely given continuity to the ancient Liberal Arts and had been associated to more selective levels of education in the recent past.

With these unification and comprehensiveness policies, the assumption of the double dimension of instruction/education in contexts of growing socioeconomic and cultural diversity boosted the emergence or reinforcement of non-subject areas targeted at thematic, project, moral, ideological, or religious training, which in practice interfered little with the knowledge-based curriculum subjects. In fact, one of the key issues in 'integration of knowledge' has been the link between the so-called integrating areas and the subjects within a mobilisation rather than addition rationale – an aspect that largely derives from the difficulty of the subject-based and segmental organisational structure to accommodate these areas of curriculum.

Curriculum integration has gained increasing importance in curriculum policies in the European context since the 1990s (Lopes & Macedo, 2011; Santomé, 1994). One of the first attempts to achieve the desired 'curriculum integration' was developed in the UK and called cross-curricular themes, which were implemented in different ways in schools[1]. A research report published by the Consortium of Institutions for Development and Research in Education in Europe (CIDREE, 2005) summarised the policies for cross-curricular themes developed since the late 1980s but especially in the 1990s in the UK, the Netherlands, the Flemish Community of Belgium and in Hungary, highlighting the persistent difficulty in launching these non-subject approaches, even when they are prescribed. This report states that the difficulty of implementing cross-curricular themes is intrinsically European: 'Probably the most obvious observation is that problems relating to the implementation of crosscurricular themes are European or maybe even universal' (CIDREE, 2005, p. 67).

We start by asking two key questions: How have curriculum policies in Portugal introduced dimensions and modalities of curriculum integration? How effective are these policies when implemented in schools? We aim to trace a brief socio-historical analysis of curriculum policies, reforms, and curriculum reorganisations concerning basic education that have incorporated

[1] In the English National Curriculum of 1988, five cross-curricular themes were identified, whose implementation was deficient in many schools (CIDREE, 2005).

modalities of curriculum integration in Portugal from Roberto Carneiro's Curriculum Reform (1989-1990) to the current curriculum autonomy policies (2016-2018).

The insights presented here are organised into three sections: the first section explains the conceptual framework that underpins curriculum integration and the emergence of cross-curricular themes as one of the first attempts in European curriculum policies to achieve this and the difficulties felt at the time of their implementation; the second section explains the methodology; and, in the last section, a brief socio-historical analysis of the policies that have incorporated dimensions and modalities of curriculum integration in Portugal is presented.

1. Theoretical Framework

1.1 Organisation of knowledge in the curriculum: subject-based curriculum

The school curriculum is built on the basis of a selection and organisation of knowledge, values and skills that derive from the socio-historical development of a given society and are accepted as valid. The whole education system has the legitimacy of transmitting to new generations a selection of knowledge and accumulated experience considered valuable for that society in a given time and context. One of the pressing issues of curriculum theory is ascertaining how curriculum selection of the knowledge and culture of a specific society can be organised.

The classic form of curriculum organisation is the subject-based model characterised by a set of juxtaposed subjects that constitute one of the elements of the public 'grammar of schooling' (Tyack & Cuban, 1995), which was institutionalised in the 19th century. The theorisation about the curriculum focused on school subjects originated in the 19th century with the work of Johann Friedrich Herbart, and was studied in depth in the 1960s and 1970s by educational philosophers such as Paul Hirst and Richard Peters, who argued for the scientific superiority of the subject devices of knowledge as organisers of the curriculum (Pinar et al., 1995). The early works by Jerome Bruner (1977) and Joseph Schwab (1983) valued academic subjects or specialised knowledge, albeit in different ways and for different reasons, as sources for the curriculum and for the objectives of education. The concepts and principles to be taught to students are drawn from the specialised scientific knowledge accumulated and refined in the epistemological evolution framework.

The history of the curriculum, since the stabilisation of the 'school model' in the 19th century (Barroso, 1995; Nóvoa, 1987) has been marked by the subject-based structure. The choice of the organisational model of the curriculum according to a subject rationale in segments of time, space and teaching practices has two fundamental reasons: (i) on the one hand, at the epistemological level, scientific knowledge has evolved over time, especially in the Post-Renaissance period, from experimental knowledge to the positivist model, regarding the rising autonomy of specialised fields of knowledge and respective scientific methods, which established a predominantly subject-based epistemological rationale; (ii) on the other hand, at the organisational level, the structure of the 'school model', geared towards mass education, took into account the dimensions of the very economy of the organisation, which favoured the prevalence of an organisation of

time and spaces by subject[2]. The structuring of the curriculum design by separate subjects served the economics of the organisation well, mainly because organisationally, the curriculum subjects lived and could/can live in the school model almost without communicating with each other.

The subject-based curriculum has been criticised by several authors in the sociology field (Apple, 1982; Aronowitz & Giroux, 1987; Bernstein, 2003; Young, 1998). Taking Bernstein's and Young's criticism as an example: that predominance makes it difficult to understand how knowledge can be applied – 'Here, the learner has to collect a group of favoured contents in order to satisfy some criteria of evaluation' (Bernstein, 2003, p. 79) – or 'the teaching of subjects as ends in themselves' (Young, 1998, p. 57)[3]; It allows knowledge to be sacralised or idolatrised, creating the illusion that the knowledge conveyed by the subjects is unquestionable (Bernstein, 2003, p. 74); The teacher has maximum control over the pedagogical relationship, making it hierarchical and ritualised, the 'transmission and evaluation of knowledge is intimately bound up with patterns of authority and control' (Bernstein, 2003, p. 73).

1.2. Organisation of knowledge in the curriculum: curriculum integration

What later came to be called curriculum integration or dimensions of curriculum integration was developed by authors of the progressive school in the early 20th century, such as Dewey that argued that the children's experiences and social themes should feature in the curriculum (Dewey, 1930; 1977b). The author criticised the discrepancy between the school, the curriculum and the child's life. In this sense, the organisation of school and knowledge hindered the apprehension of the applicability of knowledge and the reflexive thinking of the students. William Kilpatrick (1918), for instance, proposed 'the project Method', discussing what would be called integration in the dimension of curriculum design (Beane, 1997).

From the 1970s onwards, the Sociology of Education in England presented one of the most developed analyses of the concept of curriculum integration (Beane, 1997). Michael Young (1971, 1998) and Basil Bernstein (1971, 2003) analysed the principles of an integrated curriculum. Here we develop Michael Young's perspective on curriculum integration, but not before summarising the four dimensions of curriculum integration based on an seminal book, *Curriculum integration. Designing the core of democratic education* (Beane, 1997).

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[2] João Barroso (1995) analysed the wide debate on the units of class and subject in the 19th century, highlighting the option for the class with respect to the homogeneity of the groups and the subject with respect to the organisation of curriculum knowledge.

[3] Young will abandon this idea by advocating a 'knowledge-based' curriculum (2010), which actually meant a subject-based curriculum. For the sociologist, the subjects perform three functions: The first is a curriculum role. Subjects provide guarantees, through their links with subjects and the production of new knowledge, which allow students to have access to the most reliable knowledge that is available in a particular field. The second role is a pedagogical one. Subjects provide bridges for learners to move from their 'everyday concepts' to the 'theoretical concepts' associated with different subjects. The third is an identity-generating role for teachers and learners. Subjects are crucial for the teachers' sense of themselves as members of a profession. 'This identity-generating role of subjects is particularly important for students from disadvantaged homes and for their teachers. [...] With the new subject identities that students acquire through the curriculum, to add to those they came to school with, students are more likely to be able to resist, or at least cope with, the sense of alienation from their everyday lives outside school that school can lead to' (Young, 2010, p. 27).

The concept of curriculum integration brings together several more or less detailed definitions in the literature. According to Beane, the concept includes 4 dimensions. The first dimension, the integration of experiences, means mobilising student experiences (their perceptions, beliefs, and values built from their experiences) in the transmission of knowledge so that they can assimilate new meanings more easily, i.e., what is closer to the cultural, metacognitive, and personal knowledge context will be more easily apprehended (Beane, 1997, p. 36).

The second dimension is the 'social integration' that has been promoted since the origin of the state school, related to the assimilation of common values or a common elementar education, as advocated by Durkheim (1922) at the end of the 19th century. This cannot be transmitted by focusing on a collection of knowledge but by organising it into personal and social themes associated with democratic participation processes, and the inclusion of students' interests and social issues (Apple & Beane, 1995; Beane, 1997;). In this dimension, Beane has recognised the importance of teachers consulting students on the issues that matter the most to them. When the curriculum is organised around social and personal themes, the knowledge that is relevant to these themes is varied and can also include the so-called popular culture. The input of different types of knowledge, other than scientific, reflects the interests of a broader social spectrum without confining the curriculum to the culture of academic elites.

The third dimension, 'integration of knowledge', refers to the articulation of the different subjects to address curriculum content or themes, similarly to everyday problem-solving, mobilising the knowledge of the most appropriate fields (Beane, 1997, p. 45). The Integration as a 'curriculum design', fourth dimension, is about organising knowledge in the curriculum matrix around problems or issues that have personal and social significance in real life (Beane, 1997, p. 49). Knowledge is not developed with the purpose of answering quizzes or thinking about future university admittance, but the focus is on projects and activities that involve the application of knowledge.

Beane stresses that the concept of 'curriculum integration' implies not only making knowledge more accessible but also creating a 'democratic' classroom as a space for social integration. The implementation of a problem-based curriculum is based on the fact that democratic life involves collaborative work around common social issues. The participation of young people in the implementation of the curriculum is associated with the democratic participatory processes advocated by Dewey (1930).

According to Beane, the dominant subject-based curriculum model aims to initiate young people into the academic world of universities at the expense of a broader purpose, which is not only about healthy personal growth and development, but also about engaging in experiences that can promote democratic living. For Beane, broadly speaking, the integrative curriculum approach is based on 'thematic units focused on particular problems, planned collaboratively by teachers and students, framed by a democratic classroom community, and informed by knowledge from diverse sources within and beyond traditional academic subjects' (Beane, 2003, p. 108).

The volume entitled *The curriculum of the future* (1998) by Michael Young is a key reference on curriculum integration within the framework of the Sociology of Education. Young criticised

the English curriculum policies of the 1980s/90s on post-compulsory secondary education and developed the principles of 'curriculum of the future' based on the concept of curriculum integration or 'connective model of curriculum integration', refusing the subject predominance in the organisation of knowledge in the curriculum, a position he would later change (Young, 2010).

1.3. Curriculum integration in the Sociology of Education in England: Michael Young and the 'curriculum of the future'

For Young, in England in the late 1980s, the Conservative governments criticised the secondary education curriculum mainly for two reasons. Firstly, the curriculum did not meet the needs of the industry and trade; and secondly, the schools' freedom to choose their own curriculum was one of the main causes for the low levels of achievement of most students. According to the sociologist, both criticisms can be seen as a reflection of the crisis of the subject-based curriculum that has changed little in its structure since the early 20th century.

Two policy measures have emerged from this criticism. Firstly, the secondary education curriculum gained a vocational trend to prepare students for the labour market. In the early 1980s, there were few jobs for those who left school with no qualifications, which led them to stay in schools and colleges. The government's answer to these 'new students' led, according to Young, to a series of attempts to make the secondary education curriculum more 'vocational', which culminated in the 'Technical and Vocational Education Initiative' (1983). This represents the growth of the so-called pre-vocational programmes in schools and colleges that started to make visible the academic/vocational divide in secondary education and the problems of academic progress they originate. These programmes, based in schools and colleges, do not equip students with skills for the labour market. Furthermore, these programmes, designed as alternatives to the subject-based curriculum, do not provide students with the knowledge they need to progress into higher education, excluding them from accessing knowledge they need in the future in an increasingly complex and uncertain society (Beck, 1972; Beck, Giddens & Lash, 1994).

Young argues that the divide between academic and vocational learning reflects the continuing social function of the divide between intellectual and manual labour and its role in perpetuating broader social divisions. While curriculum reform cannot bring about wider social change per se in the absence of more comprehensive economic, cultural and political initiatives, it is a necessary step in such change and can lead to learning opportunities where intellectual and manual divisions are not perpetuated. Thus, the secondary school curriculum could be analysed in terms of the stratification of knowledge combined with social inequalities and a broader distribution of power in society.

The second policy measure was the creation of the National Curriculum (1988), based on traditional subjects. The English National Curriculum had been designed to limit the freedom of teachers and schools. In Young's view, these two policy measures could be seen as attempts to overcome the weaknesses of low performers without significantly changing the curriculum for high performers. The assumptions behind the National Curriculum continued to endorse

a passive view of the learner in relation to knowledge and the traditional view of subjects as 'ends in themselves' separate from any contexts in which the knowledge they gave access to could be applied.

Based on this criticism, Young proposes a definition of the principles of the 'curriculum of the future', developing a curriculum model in response to the changes in the organisation and production of work that were being experienced by Western countries and to the concept of a 'learning society'.

For the sociologist, the crisis in secondary education in all Western European countries, such as England and Wales, is explained by the changes in the global economy, namely, the 'flexible accumulation' (Harvey, 2008) marked by the flexibility of work processes, markets, products and consumption patterns: the manufacturing and commercial success of the new Asian economies, the spatial dispersion of factories around the globe (decentralisation of production), and the intensification of the use of new automation technologies that implied the reduction of unskilled and semi-skilled jobs. These economic changes led to the disappearance of the youth labour market in the 1980s and consequently to an increase in the number of full-time students in post-compulsory secondary education.

According to Young, these new changes in the global economy involved a new relationship between academic subjects and the world of employment. One of the main educational objectives of a new curriculum for secondary education was to make students aware of these changes in the organisation of work. The approach proposed by Young does away with the traditional divide in the curriculum between personal developmental and economic goals associated with progressive education (Dewey, 1930). It does not consider 'education for personal development' to be different from 'education for work', it recognises that personal experience and economic change have become deeply intertwined since the early 1980s. Compared to previous periods, school-age young people experience a much higher density of messages about economic life and work than in the past.

Thus, the secondary school curriculum needs to combine subject knowledge with an understanding of the changing nature of work for every student. Young explores how to conceptualise the meaning of 'vocationalism', which leads to an approach that links academic subjects and the world of employment, developing their 'vocational' aspects. Thus, allowing students to understand the changing world of employment they will face as adults.

The implications for the secondary school curriculum are the elimination of the stratification of knowledge and the divide between academic/vocational knowledge. This leads back to the dimensions of 'knowledge integration' or 'integration as curriculum design' of curriculum integration, as only these can dissolve the hierarchy of knowledge in the curriculum and its unequal distribution among students. The curriculum for every student should be based on explicit links between school subjects and the changing nature of work, and work experience should be a 'connective' feature in the curriculum.

For Young, personal and social development cannot be disconnected from the experience of work/employability because to be employed in one of the new organisations of the global

economy, one must learn how to behave morally or be tolerant. In the chapter entitled 'Integrating Personal and Social Education into the 14-19 Curriculum', he develops the 'social integration' dimension of curriculum integration by discussing the need for personal and social education to be at the core of the curriculum. Accordingly, the relationships between the subjects and the curriculum as a whole need to be reconceptualised on the basis of what he calls a 'connective model of curriculum integration'. The first premise is that secondary education is not only about access to the basic areas of knowledge, nor only about learning skills and knowledge suitable for specific jobs but also about the personal and social education of students as future adults, professionals, and citizens. The second premise is that the importance of personal education calls for a new approach to the curriculum that can change the relationship between the personal and social development objectives, the educational objectives of the school subjects, and the curricular objectives of the school as a whole.

For Young, the crucial question is understanding how schools define their curriculum objectives and how teaching specialised subjects is tied to the objectives of the school curriculum as a whole. Young argues that a model for integrating personal and social development into the curriculum would need to reverse many school and teacher practices. First, it does not stem from the curriculum objectives of the subjects but from a broader notion of curriculum objectives and how the subjects can accomplish these objectives per se and combine with the other subjects. Secondly, it does not stem from the objectives of the National Curriculum but from how schools set their curriculum objectives in order to accomplish the objectives of the National Curriculum. Schools need to define their objective in terms of the kind of young person, adult, employer, citizen and parent they want their students to become, discussing it with parents, employers, the school community and others; and the kind of skills, knowledge and attitudes that students will need when they leave school to fulfil such roles. Instead of treating the National Curriculum as something imposed, schools need to interpret it. Young wishes to emphasise that 'in a connective model of curriculum integration, personal and social education becomes one of the sets of criteria a school uses for interpreting the National Curriculum Orders' (Young, 1998, p. 95).

This implies redefining the role of specialised teachers and the role of subjects considered as ends in themselves. A teacher's specialised knowledge is not defined by what they do not have in common with other teachers: the 'connective subject specialist' is someone who is not only specialised in a given subject but can also understand how their subject relates to the wider curriculum objectives by establishing links with other subjects.

Young also discusses the issues of knowledge and the curriculum on the basis of the concept of the 'learning society' related to the concept of 'connective specialisation'. In the chapter entitled Post-compulsory Education in a Learning Society, the concept of a learning society is defined as the transformation of all institutions into 'learning organisations' and thus linking learning beyond specialised educational institutions such as schools or colleges. Such 'learning organisations' would be characterised by a research capacity that would enable them to design a human resource development strategy that links the 'continuous re-professionalisation' of every employee to the objectives of the organisation. This would involve more and more organisations from different sectors taking on an educational role, which would not imply a

reduction in the educational role of schools and colleges as specialist teaching, learning, or research organisations.

Rather, it would involve partnerships between schools and colleges and other organisations to develop shared concepts/ideas that would shape the external relationships between schools/colleges and the industry and service sectors, as well the internal relationships between the different specialist teachers in different fields and lines of study. For Young, the concept of connective specialisation is the basis for new relationships between institutions and for a new curriculum model – 'insulated (and in many cases divisive) specialization to connective specialization based on negotiated understandings between organizations about common purposes and futures' (Young, 1998, p. 151).

Thus, the concept of 'connective specialisation' subscribes to the idea of learning as a social process in society throughout life and not just a feature of specialised educational institutions. He defines the 'connective curriculum model' as the 'diversification and interconnection of sites of learning and a shift in the location and role of educational specialists; their relationship with other specialists and productive work of all kinds becomes based on learning relationships' (Young, 1998, p. 150).

Learning would not be separated from the specific production or work processes where the employee 'as a learner' can be involved in innovation and therefore be productive because they will eventually be needed in the future.

The educational implications of this 'learning society' model for curriculum reform are (i) the new concepts of institutional and curriculum specialisation need to replace the divisions between school and non-school learning and academic and vocational curricula; (ii) a new concept of specialisation process; (iii) a reconceptualisation of the relationship between learning and production that takes into account the changing nature of employment at the end of the 20th century.

To sum up, at the heart of the proposals for a curriculum of the future we can primarily find an emphasis not on new knowledge, but on new relationships between subject-specific and non-subject-specific knowledge, with links between the specialisation of knowledge and the specialisation of the division of labour, between theory and its application, as alternatives to the stratification of knowledge in existing curricula, the divisions between academic/vocational knowledge, the isolation of subjects and the separation between school and non-school learning.

We should now look at how curriculum integration can be called up by curriculum policies.

1.4. Curriculum integration in curriculum policies

Lopes and Macedo (2011) group the proposals that deal with the curriculum integration of curriculum policies into three major modalities: (i) integration by the common elements of the subjects; (ii) integration by the interests of students in view of social or political demands; (iii) integration by the skills that students should acquire.

The first modality, broadly speaking, values the subject-based curriculum and simultaneously the types of integration of knowledge based on their common concepts, issues, themes, and methodologies. In this modality, specialist teachers can carry out one-off projects or activities, or more lengthy ones, mobilising the different subjects.

The second modality, integration by the interests of students in view of social or political demands, goes back to progressive education. Dewey was among the first authors to stress the need to link the school experience to society. The school should enable students to reconstruct the experience and knowledge of their own community: 'I believe that the school must represent present life – life as real and vital to the child as that which he carries on in the home, in the neighborhood, or on the play-ground' (Dewey, 1897, p. 77). For Dewey, the central focus of the curriculum lies in learning for social life, fostering the ability to construct knowledge through problem-solving. At school, the child is confronted with actual social problems, learning to act democratically.

Another author of the progressive school, William Kilpatrick, systematised the project method by taking Dewey's works into account. Kilpatrick (1918) proposed the project as a method that enables students to solve everyday problems in the classroom. The activities are organised by the students in teams, and the teacher guides the integration of knowledge required to solve the questions raised. The project would foster new skills and attitudes in students that could be applied in their social environment.

In this project method, or approaches to the principles of Dewey and Kilpatrick, the core idea is that certain themes linked to personal development, the students' social environment and issues of social importance form part of the curriculum, cutting across school subjects.

This second modality of curriculum integration, a curriculum organised by personal or social interests, can be implemented by four different modes that are not mutually exclusive: (i) organising the curriculum by themes and not by subjects; (ii) carrying out one-off or extended projects, without overshadowing the school subjects, but mobilising them; (iii) organising activities that involve two or more school subjects that enable the approach to personal and social themes (Lopes & Macedo, 2011); (iv) enabling all subjects to contribute to cross-curricular themes.

The core idea is that by tapping into the personal and social interests of the students, it will be possible to meet the objectives that the school subjects have failed to meet since these are regarded as too removed from the everyday life of the students and their interests because they tend to be closer to academic objectives. These aims are linked to the problems of contemporary societies or personal development: preservation of the environment, defence of equal rights, health education, etc.

The third modality, curriculum integration by the skills that students should acquire, is called up by curriculum policies as a set of skills to be acquired by students throughout their compulsory schooling or at certain stages of that period. It is assumed that the teachers of the different subjects by themselves and together with the other teachers can develop these skills.

In curriculum policies, the cross-curricular themes to be developed by every subject may have been one of the first attempts to implement the dimensions of curriculum integration.

1.5. Cross-curricular themes in curriculum policies

According to two studies by CIDREE (1998, 2005), most European countries had implemented cross-curricular themes by the 1990s. In 1998, CIDREE published a document entitled *Across the Great Divides* that describes the practices, implementation problems and assessment in relation to cross-curricular themes in Europe between 1996/1997. At the time, the results collected from a questionnaire demonstrated the existence of 13 themes across the various countries and it was considered a 'reference document in many education systems across Europe and beyond' (CIDREE, 2005).

In 2005, CIDREE published *Cross-curricular themes in secondary education*, research conducted in Wales, England, Hungary, the Netherlands, and the Flemish Community of Belgium, based on case studies applied to schools working with cross-curricular themes also to assess practices, implementation problems, evaluation, and good practices.

Also, at a European conference in 2001, Maes et al. presented the results of a questionnaire applied in 27 European countries on the compulsory nature of cross-curricular themes and the number of subjects included in the curricula. At the time, all the countries presented various themes, and some of them were compulsory. For example, when the English National Curriculum was introduced in 1988, it included five cross-curricular themes: environmental education, health education, citizenship, economic and industrial understanding, career education and guidance (Whitty et al., 1994a). In the 1990s, cross-curricular themes were considered a means for educational reform (CIDREE, 2005).

In our view, there were two clearly identifiable lines in European policies with the spread of cross-curricular themes in the late 1980s and early 1990s. It is therefore important to consider the convergence – throughout the various reforms or reorganisations of the curriculum in the European context – of these two lines that generated a degree of integration between the subjects: on the one hand, the formative dimensions in the scope of citizenship, psychological development and/or social intervention; and on the other hand, the attempt to overcome the issues that were brought about by the subject fragmentation. These two lines, although historically generators of subjects, can also promote the joint work between subjects.

The first line, present since the origin of the national education systems, is the combination in the curriculum of the educational/formative dimension of the person and the citizen with the dimension of the subject instruction, which has always relied on a balance between subjects or areas, on the one hand, and their transversality in the curriculum subjects, on the other, assuming that the subjects themselves contain or should contain the educational desideratum (Menezes, 1995; Roldão, 1993).

The second line is the one that appears more often associated with the current designation in the discourse of curriculum policy texts as interdisciplinarity, despite the scarce epistemological accuracy of this designation, since interdisciplinarity requires a meta-analytical and reconstructive process that becomes clear in the interactive research of the complexity of reality (Pombo et al., 1993). It seems more accurate to refer to this line generically as curriculum

integration or specifically, as one of its dimensions, such as 'integration of knowledge', as it implies joint work between all the subjects.The cross-curricular themes linking these two lines refer to personal and socially formative themes and require the 'integration of knowledge'.

This is how its inclusion, for example, in the English national curriculum is justified (Whitty et al., 1994a). In England, the emergence of cross-curricular themes was a response to the limited model of the subject-based curriculum and a way of introducing skills, knowledge and attitudes that were not part of the formal curriculum:

> However, the emergence of cross-curricular themes was partly a response to criticisms of the narrowly subject-based curriculum that has characterized secondary education as being an inadequate preparation for the world beyond school. The invention of the notion of cross-curricular themes was predicated on the belief that pupils needed to be able to synthesize learning from a range of different subjects and apply this to life beyond school. (Whitty et al., 1994a, p. 175).

In the 1990s, most research on cross-curricular themes took place in the Anglo-Saxon world (CIDREE, 2005). For this reason, we provide below a short summary of that research, taking the English case as an example. When the English National Curriculum was promulgated (1988), little indication was provided on the relationship between subjects and cross-curricular themes. Schools were advised that themes could be taught from within the subjects or vice versa and from within 'religious education' or 'personal and social education' (PSE).

> Some pronouncements indicated that themes would be taught through subjects, while others seemed to suggest that subjects could be taught through themes. The NCC Guidance on the whole curriculum presented a very open relationship between subjects and themes (NCC, 1990), and the subsequent guidance on the individual themes suggested that they could be taught in a variety of ways. Although it was suggested that discrete provision might prove necessary for some elements, many aspects of the themes could be taught through the core and other foundation subjects or through religious education. (Whitty et al., 1994b, p. 26).

This research highlighted several problems related to the practices, implementation, and evaluation of cross-curricular themes. Regarding the most recurrent practices, the studies mention the low status attributed to cross-curricular themes, which may explain the scarce extension of the themes in the subjects in the curriculum or the limited development in schools and the absence of their evaluation. Lord and Harland's (2000) study reveals the tendency for PSE not to be considered a proper subject with any standing in the curriculum. Furthermore, the authors found that Geography, English, and Science were the leading carrier subjects for cross-curricular themes as a whole. On the other hand, Modern Languages, Technology, and Expressive Arts were notably absent as carriers of cross-curricular themes. In another study, Morris and Schagen (1996) showed that Geography and Science are the main subjects for teaching environmental education in English schools. Garratt and Robinson (1994) pointed out that the five cross-curricular themes identified by the National Curriculum in England were not adequately developed in many schools. The survey released by the European Conference (Maes et al., 2001) on the implementation of cross-curricular themes revealed that five countries considered that the lack of evaluation was responsible for the low status of the subjects.

Research has shown that the role played by teachers and schools is very important for the effective implementation of cross-curriculum themes. However, some studies have highlighted that many teachers report a lack of confidence in teaching cross-curricular themes (Saunders et al., 1995) or a lack of training (Kerr, 1999; Maes et al., 2001; Van Looy, 2002; Whitty et al., 1994). According to Kerr (2003), this is due to the fact that certain topics, such as citizenship, do not rely on a strong academic tradition and there is still little research on them. Maes et al. (2001) stress that collaboration between teachers and the involvement of all the teachers in the school are essential conditions for the effective implementation of cross-curricular themes. However, in most schools in the 27 European countries, it is difficult to coordinate teachers to establish a general policy or culture on cross-curricular themes.

Considering the problems that surround the implementation of the cross-curricular themes themselves, studies highlight that teachers report a curriculum overload and that only a small part of the curriculum is devoted to those themes (Hargreaves, 1991; Kerr, 1999; Saunders et al., 1995). Furthermore, some concepts/objectives inherent in cross-curricular themes are contested by teachers, such as citizenship (Beck, 1996), as they consider that it may contain 'the danger of promoting bias and indoctrinating pupils', thus teachers become less committed to teaching cross-curricular themes (Kerr, 1999). Heater (2001) argues that fear of schools becoming forums for destabilising indoctrination in England is a possible cause of the poor implementation of citizenship education.

Implementation problems are also reported at the macro-level of curriculum policies. Several studies point to the inadequacy of curriculum guidance documents (Beck, 1996). According to Hargreaves (1991), the purpose of curriculum reforms is the improvement in the quality of teaching/learning, which requires greater curriculum coherence and flexibility, where the various parts of the curriculum have an explicit relationship with each other. However, the task of creating coherence among the cross-curricular themes and between these themes and the curriculum is left to the teachers. Lack of financial support is another obstacle, especially for topics that require activities that have to be performed outside the school grounds, such as environmental education (CIDREE, 2005).

From the above, it is easy to see that the difficulty of implementing cross-curricular themes is European (CIDREE, 2005, p. 67), which has possibly contributed to the maintenance of a subject-based curriculum, poorly accommodating these supposedly innovative areas of curriculum.

2. Methodology

We favoured a qualitative methodology (Denzin & Lincoln, 2018), given our key questions. To answer the first question – How have curriculum policies in Portugal introduced dimensions of curriculum integration? – we employed a documentary analysis of the political regulations that substantiated the main curriculum reforms and reorganisations related to basic education from the implementation of Roberto Carneiro's Curriculum Reform (1989-1990) to the current curriculum autonomy policies (2016-2018). To answer the second question – How effective are these policies when implemented in schools? – a survey was conducted to ascertain the difficulties in implementing these policies, assessed on the basis of the studies that evaluated them.

The policy regulations were imported into Maxqda 20 to carry out a thematic content analysis, based on a mixed category system (Bardin,2016). The categories (deductive coding) were created based on curriculum integration dimensions (Beane, 1997) and on the modalities of the proposals regarding the curriculum integration of curriculum policies (Lopes & Macedo, 2011). The subcategories (inductive) were created based on the discourse of the political regulations.

The rule for category enumeration was frequency (Bardin, 2016). To validate the content analysis, we used intercoder agreement. A researcher from the curriculum field checked the validity of the coding performed. The concordance index of 0.88 was quite acceptable (Krippensorff's Alpha).

3. Socio-historical context of curriculum integration in Portugal

3.1. Roberto Carneiro's curriculum reform: integrating areas – School Area and Personal and Social Education

The many and somewhat chaotic changes that occurred at the curriculum level in that first decade of the democratic state in Portugal served only to take the leap to a level of stabilisation with the publication of the Education System Framework Law in 1986 (Law No. 46/86 of 14 October), which is still in force, and the overall Curriculum Reform that took place in 1989. Finally, in this context, in the ministry of Roberto Carneiro, a reform that had been long prepared and discussed resulted in the adoption of dimensions and modalities of the curriculum integration.

According to the Framework Law, Roberto Carneiro's curriculum reform established the dimension of the 'social integration' from Personal and Social Education (PSE), which should take various forms: (i) In cross-curricular themes, such as the 'valorisation of the human dimension of employment', and the 'proficiency in the mother tongue' (Law No. 46/86, Article 9); (ii) in a specific subject dedicated to the integrated dimensions of student development and social issues (provided for in Article 47(2) of the Education System Framework Law) – Personal and Social Development (PSD) was offered as an alternative to Moral and Catholic Religious Education; (iii) in a specific area for the 'integration of knowledge' – the School Area ('Non-Subject-Based Curriculum Area') (Decree-Law No. 286/89, Article 6) aimed at integrating different subjects and their respective teachers, developing with the students 'multidisciplinary activities and projects', interventions for personal and social education, regional/local dimensions; it was managed at school level, expressly summoning up the idea of autonomy, so often repeated even in the current documents. In the third cycle of basic education, the School Area had a compulsory component expressed in a civic education programme[4].

The 'social integration' dimension is expressed in several ways in the curriculum design, either in a subject, in a curriculum area, or across subjects. The curriculum area of the 'integration of knowledge' dimension is tucked away in curriculum spaces, standing apart from the subjects.

[4] With the support of the Institute for Educational Research, various versions of this programme were drawn up and tested but were never approved as a whole.

The principles underpinning the curriculum reform, where 'integration of experiences' is not explicitly referred, include: *imparting an interdisciplinary perspective to the curriculum, fostering curricular autonomy in the elaboration of multidisciplinary projects, establishing school-community partnerships, promoting curriculum autonomy, calling upon regional and local dimensions and school autonomy* (Decree-Law 286/1989, preamble), which were marked by Roberto Carneiro's Reform. These principles created a disruptive symbolic territory that had a lasting influence on the system, despite the difficulties and resistance that characterised its development process.

We can identify two major forms of curriculum integration (Lopes & Macedo, 2011) that maintain the subject model: (i) integration by the common elements of the subjects (possible in the School Area); (ii) integration by the students' interests in view of social or political demands.

The School Area and PSE gave rise to a great deal of research and training, which is documented in the publications and studies of the former Institute for Educational Research, whose collection is today in the care of the Directorate-General for Education from the Ministry of Education. In the case of the School Area, there were very interesting experiences, but there was often some resistance to the organisational format it entailed due to the need to involve the teachers of each subject in collaborative work, which was not rooted in the school culture. The absence of teacher training in project methodologies also influenced the little involvement of teachers in the School Area (Branco, 1993; Cibele & Branco, 1992).

The implementation conditions also made that path quite hard, since the regulations provided that the School Area

> in the first stage, will be organised in accordance with the corresponding reduction of teaching hours of the subjects involved in each project' and 'in the second stage, the non-subject curriculum area will have its own hourly credits, in addition to the teaching hours of each subject. (Decree-Law No. 286/89, Article 6(3-4)).

The territorial struggle for subject hours and the fight against alleged 'losses' was one of the problems encountered in the first stage: The two obligations, complying with the program (especially in subjects of greater academic nature) and carrying out school-area activities, become incompatible (Caria, 1995, p. 66). The path often entailed reducing the number of subjects and teachers involved (Pacheco, 1994).

Still on the implementation conditions, the studies highlighted the insufficient financial resources to carry out activities and projects (Pacheco, 1994) and the lack of monitoring of school projects, by the Ministry of Education, in their design and evaluation phases (Cibele & Branco, 1992).

3.2. Reconfiguration of the curriculum at the national and school level: the transition to the 21st century

After the stabilisation of the 1989 Reform, the curriculum policies of the 1990s and early 21st century in Portugal and in the Western world, especially in Europe, stemmed from the failure that

universalisation had brought into the school system. Thus, the changes from then on focused mainly on the reconciliation of the central curriculum prescription levels (core curriculum, national curriculum) and the level of decision and curriculum adaptation schools were allowed, configuring a curriculum binomial that had to be combined. The new proposals for non-curriculum integrating areas are marked by this new concern (Roldão, 2000).

3.2.1. The 2001 reorganisation: non-subject curriculum areas

The curriculum reorganisation of 1996-2001 defined two levels of curiculum decision: on the one hand, the established National Curriculum (2001) and on the other, promoting the autonomy and contextualisation of this curriculum through its re-signification in each school based on its School Curriculum Project (SCP) and Class Curriculum Projects (CCP), which would ideally convey the curriculum learning prescribed nation-wide and adapted to the particular contexts. Together with this major change, there was also the desire to develop and deepen the transversal work areas, embodied in what is called Non-Subject Curriculum Areas (NSCA) (Decree-Law No. 6/2001 of 18 January).

These areas, all with allocated hours, included the Project Area (that inherited the objectives of the School Area), Civic Education, and Guided Learning, the latter aimed at the development of the students' competence to organize their learning activities autonomously. The dimension of 'social integration', the PSE was the umbrella from which the NSCA were derived, giving importance to the PSE, which went from being a subject to a major area with three sub-areas (the NSCA). Thus, the dimension of PSE was materialised (1) in the Project Area, which aimed at carrying out projects by integrating of knowledge derived from various curriculum areas, around problems or research/intervention themes [i.e., social training], 'according to the needs and interests of the students': included in the 'integration of knowledge' dimension like the next area; (2) in the Guided Learning that allowed 'the appropriation by the students of study and work methods and promoted the development of attitudes and abilities that favour an increasing autonomy in the learning process'; (3) in Civic Education, 'a privileged space for the development of citizenship education', 'aiming at the development of the civic awareness of the students' and their 'individual and collective participation in the life of the class, the school and the community'; (4) in the cross-curricular themes, in the field of the Portuguese language, in the human dimension of work and in the use of information and communication technologies for the acquisition of 'basic skills' to be developed by the subjects per se; 5) and in the official document *National curriculum for basic education – Essential competencies* (ME/DEB, 2001), which includes a set of generic skills, guided by principles and values to be developed jointly between the subjects/curriculum areas, in a cross-curricular manner, as well as a set of specific skills for each subject.

The 'social integration' dimension is present in the curriculum design in several ways, both in a specific curriculum area and across all subjects in the cross-curricular themes and in the competencies to be acquired. The curriculum areas of the 'integration of knowledge' dimension, in turn, are tucked away in curricular spaces and standing apart from the subjects.

From the principles that underlie the curriculum reorganisation the 'integration of experiences' dimension stands out: *are integration and contextualisation of knowledge, significant learning and comprehensive training of students, valorisation of experimental learning, integration of theoretical and practical dimensions, school autonomy towards the definition of a curriculum development project, valorisation of the diversity of teaching methodologies and strategies* (Decree-Law No. 6/2001, Article 31).

In this curriculum reorganisation, we can see the existence of three major forms of curriculum integration, but always maintaining the subject model: (i) integration by the common elements of the subjects (possible in the Project Area); (ii) integration by the students' interests in view of social or political demands in their various forms; iii) integration by the skills that students should acquire at the end of elementar education.

Since the 1990's, with the two levels of curriculum decision, the concept of competence assumes a renewed relevance in the Portuguese curriculum policies, as it allows focusing the common knowledge in a core set of competences to which the different subjects should converge. With the ten general competences of the National Curriculum (ME/DEB, 2001), the purpose of personal and social development becomes explicit as a determinant of the whole curriculum construction of basic education (the 9 years of compulsory education). The profile of competences has been included in a common purpose with the FPS subject area/subject from then on.

A case study lasting two school years sought to understand school practices in NSCA (Bettencourt et al., 2008). Its results showed that NSCA often ended up embodied in a specific teacher. This resulted in the unwanted domination of a specific subject, which also affected the Project Area, reducing the number of participating teachers, similarly to what had happened before with the School Area. The effect of these NSCA, beneficial in some schools, had the drawback of favouring the separation of these new areas from the classic subject areas that would need to be integrated in a more contextualised way into the SCP and CCP.

The very terminology employed in the 2001 curriculum reorganisation suggests a marked difference between 'subject curriculum areas' and 'non-subject areas'. A report evaluating the policies of the 2001 curriculum reorganisation already stresses that as NSCA are spaces for the development of transversal skills and attitudes 'without the contribution and support of the knowledge and procedures provided by the subjects', this is not feasible (Alonso et al., 2001, p. 58). Hence, researchers suggest that the designation 'integrating areas' is more appropriate because it responds to what they represent in the curriculum design. This research also revealed that in many of the schools that experimentally applied the principles of the 2001 curriculum reorganisation, these principles were limited to the NSCA, 'without changing the essential, which is to make learning more meaningful and functional, more integrated and enabling the overall development of the student as a person and citizen, at all times of their school life' (Alonso et al., 2001, p. 58).

In general, the NSCA blurred the centrality of the work in terms of transversality in favour of using these non-subject spaces as strategies to promote success and support students, and the use of project work dimensions continued to be central in some schools in the respective area,

seeking to maintain the ideas of contextualisation, reinforced with the idea of significant learning and some intervention.

Several teachers mentioned the absence of common working hours as an impediment to the collective planning of activities, as well as the lack of training to implement the project work methodology (Bettencourt et al., 2008, p. 61). The Guided Learning and Project Area were perceived by some schools as 'minor' areas that 'represented a waste of time responsible for subtracting hours from core areas of knowledge' (Bettencourt, 2008, p. 59). The lack of funding in the areas of Civic Education and Project was another reason given for the infrequency with which the school went outside its walls for students to have contact with the community (Bettencourt, 2008, p. 49).

We would like to underline that the curriculum change of 2012, led by a government (2011-2015) with a different political matrix supported by the Social Democratic Party and the Christian Democrats (PSD and CDS), updated the structure of the curriculum towards the 'reduction of curriculum dispersion' (Decree-Law No. 139/2012 of 5 July, preamble), which was substantiated in the elimination of the NSCA and in the repeal of the official document, *National curriculum for basic education – Essential competencies* (Order No. 17169/2011).

3.3. Curriculum autonomy – 2016-2018: new configurations of curriculum integration

The most recent transformation process in the Portuguese curriculum policies – Autonomy and Curriculum Flexibility (2016-2018) – has introduced a different approach that focuses on the curriculum work of teacher teams and school leadership, establishing quantified margins of autonomy and flexibility that can transform the segmenting logic of work into a different rationale that is integrating but also contextualised and managed by schools within a common reference framework (Decree-Law No. 55/2018 of 6 July). These recent curriculum policies followed a more participatory trend, where Teachers' Associations (TAs) played an active role:

> In the most recent curriculum redesign (2016-2018), characterised by a restructuring of the existing curriculum documents in the light of the Students' Profile by the End of Compulsory Education (Order No. 6478/2017 of 26 July), which originated the principles that underlie the Essential Learnings (Order No. 6944-A/2018 of 19 July) for each area or subject, guided by a standard curriculum reference (Roldão, Peralta & Martins, 2017), the participation of the TAs was different because they assumed the status of authors of the formal curriculum for the first time. The ME invited the associations to form teams in charge of EL production, sometimes including invited experts, and interact with a team of researchers in the curriculum area who produced guidelines and ensured feedback on the documents drafted along the process. (Almeida et. al. in press).

In this process, even though there are no specific areas of curriculum integration in the curriculum organisation, the 'integration of knowledge' is maintained and has been acquiring a growing place in the political discourse: of the *flexibility in curriculum management, curriculum autonomy, the constitution of educational teams, focusing on the work with the students, project work, problem-solving, significant learning* (Decree-Law No. 55/2018, preamble); or

by envisioning teachers as the main agents of curriculum development, promoting the adequacy of the curriculum to the contexts of each school community, the involvement of students and parents in the school's curriculum options, the valorisation of the interdisciplinary and the combined management and teaching of the curriculum, the importance of the transdisciplinary nature of learning, and the valorisation of collaborative and interdisciplinary work (Decree-Law No. 55/2018, Article 4).

Curriculum integration is now more clearly referred to the autonomy of schools and the reinforcement of the organisation of teachers in teams, working towards the 'integration of knowledge' in their respective specialised fields. Collaborative work in the classroom between subjects is embodied in the so-called Curriculum Autonomy Domains (CAD), whereby the school can manage up to 25 per cent of the total workload of the curriculum matrices (Order No. 181/2019 of 11 June). CAD correspond to spaces of 'integration of knowledge' that results from the practice of managing the flexibility of the curriculum for which several subjects are mobilised.

The PSE dimension has been valued in curricular policies, and in this curriculum reorganisation, it has become a priority, hence the National Strategy for Citizenship Education (NSCE), which resulted from the proposal drawn up and presented by the Working Group on Citizenship Education (see Order No. 6173/2016 of 10 May). The NSCE was constituted as a reference document to be implemented in the 2017/2018 school year together with the Students' Profile and the Essential Learning.

In the 'social integration' dimension, the PSE is materialised in three ways: (i) in the first cycle, in cross-curricular themes; (ii) in the second and third cycles, it gains autonomy as a subject, with several themes, Citizenship and Development, comprising 'a space for the valorisation of an interdisciplinary approach', 'whenever there is a curricular interconnection with other subjects, at the level of learning': also including the 'integration of knowledge' dimension (NSCE, p. 9); (iii) in the Students' Profile, which is structured in principles, vision, values and areas of skills that the subjects will implement.

The main difference in this curriculum reorganisation is that the 'integration of knowledge' dimension is no longer tucked away in curriculum areas, separate from the subjects. Interestingly, now one of the subjects, Citizenship and Development, is included in the 'integration of knowledge' dimension.

In this curriculum reorganisation, we can see the existence of the three major forms of curriculum integration but always maintaining the subject model: (i) integration by the common elements of the subjects (DAC); (ii) integration by the students' interests in view of social or political demands in their various forms; (iii) integration by the skills that students should acquire. Compared to the previous curriculum reorganisation, the competence profile now assumes a more comprehensive (elementary and secondary education) and integrated rationale.

It is still too early to evaluate this policy. However, in the evaluation report of the recent Autonomy and Curriculum Flexibility Project (Order No. 5908/2017 of 5 July), where 226 school groups and non-grouped schools expressed interest in implementing the current policies

experimentally, some difficulties were mentioned, particularly concerning teacher collaboration that enables curriculum integration. The three chief difficulties were (1) 'Incompatible schedules and the time available to meet and work together, which implied, in some situations, meetings after hours'; (2) 'Teachers were discouraged and demotivated by some disbelief in the project associated with some insecurity and resistance to changing practices'; (3) 'Envisioning the classroom as something that is not teacher-centred and combining the contents of different subjects, as well as opening each other's classroom to other teachers' (Cosme, 2018, p. 34).

Conclusion

Following the steps summarised here, we have seen the existence of curriculum integration, mostly in two dimensions (a) towards formative dimensions, i.e., 'social integration'; and (b) towards the connection between subjects, i.e., 'knowledge integration'. These two dimensions are often associated either with each other or with the different curriculum solutions found.

These two dimensions imply an endless debate on the place and form of the so-called 'transversal' components in curriculum design: (a) in a curriculum or subject space of their own; (b) and/or without their own space but transversally embodied by the different subjects.

The 'social integration' dimension, of the personal and social training, present in the curriculum design since the origin of the national education systems, since the Roberto Carneiro Reform, has been assuming a growing relevance in several curriculum formats – specific subject, curriculum area, cross-curricular themes and competence profiles, becoming a 'priority strategy' in the current educational policies.

The areas of the 'integration of knowledge' dimension have marked the Roberto Carneiro Reform since the beginning, but their implementation has been very deficient. We believe that one of the obstacles to curriculum integration that has not been thoroughly dealt with in the literature is the link between the so-called integrating areas and the subjects with a mobilisation rather than an addition rationale – an aspect that, in the Portuguese case, stems largely from the difficulty of the subject-based organisational structure to accommodate these areas of curriculum. This is partly due to the fact that the integrating areas are conceived in the curriculum policies separate from subject areas as if the 'integration of knowledge' had its own curriculum space apart from the subjects: the School Area in the 1989 Reform and the NSCA in the 2001 curriculum reorganisation. The 2016-2018 curriculum reorganisation reversed this rationale in a more professed way. We should stress, however, that although the subject-based school model rationale has not been dispelled, there has been a reinforcement of measures aimed at its gradual transformation into a curriculum development process that is more autonomous and more focused on its main agents – teachers and schools – and establishes the integration of knowledge in the 'sacred' space of the traditional academic subjects.

The problems raised by the implementation of the first attempts at curriculum integration in the 1990s found in the Anglo-Saxon research can still be seen three decades later in the Portuguese context. Some recurrent issues are the lack of teacher training and the persistence

of a non-collaborative culture among teachers. Moreover, in Portugal, four-year terms of political office, the non-existence of long-term party agreements on education, as well as the disagreement on educational values and principles between the parties in the governing spectrum, have led to policy changes that are either favourable or unfavourable to the 'integration of knowledge'. The curriculum changes of 2011-2015 implemented by Nuno Crato's ministry contributed to the non-consolidation in the school culture of the disruptive symbolic territory that marked the Reform of 1989-1990.

We have seen the existence of three major modalities of curriculum integration, although the subject school model has been upheld: (i) integration by the common elements of the subjects; (ii) integration by the students' interests in view of social or political demands; (iii) integration by the skills that students should acquire.

This last modalitie, the profile of competences to be acquired by the students is included, since the curriculum reorganisation of 2001, in a very close purpose with the FPS area/subject, shaping a (dis)continuity that is still to be further researched.

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References

Almeida, S. de., **Viana**, J., **Barcelos**, N., **Roldão**, M. C. & **Peralta**, H. (in press). Network curriculum design? Relational dynamics of teachers' associations in the design of Essential Learning in Portugal. *Revista Portuguesa de Educação.*

Alonso, L., **Peralta**, H. & **Alaiz**, V. (2001). *Parecer sobre o projeto de gestão flexível do currículo*. Departamento de Educação Básica.

Apple, M. W. (1982). *Education and power*. Routledge.

Aronowitz, S., **Giroux**, H. A. (1987). *Education Under Siege. The Conservative, Liberal and Radical Debate over Schooling*. Routledge.

Bardin, L. (2016). *L'analyse de contenu*. Edições 70.

Barroso, J. (1995). *Os Liceus: organização pedagógica e administração (1836-1960)*. Junta Nacional de Investigação Científica e Fundação Calouste Gulbenkian.

Beane, J. A. (1997). *Curriculum integration. Designing the core of democratic education*. Teachers College Press.

Beane, J. A. (2003). Integração curricular: a essência de uma escola democrática. *Currículo sem Fronteiras, 3*(2), 91-110.

Beck, J. (1996). Citizenship education: problems and possibilities. *Curriculum Studies, 4* (3), 349-366.

Beck, U., **Giddens**, A. & **Lash**, S. (1994). *Reflexive Modernisation*. Polity Press.

Beck, U. (1972). *Risk Society.* Sage.

Bernstein, B. (1971). On the Classification and Framing of Educational Knowledge. In M. F. D. Young (Ed.), *Knowledge and Control. New Directions for the Sociology of Education* (pp. 47- 69). Collier-Macmillan.

Bernstein, B. (2003). *Class, codes and control. Towards a theory of educational transmission* (Vol. III). Routledge.

Bettencourt, A. M. (Coord.) (2008). *Qualidade do ensino e prevenção do abandono e insucesso escolares nos 2º e 3º ciclos do Ensino Básico: O papel das Áreas Curriculares Não Disciplinares (ACND): O relatório do projeto 2006-2008*. Direcção-Geral de Inovação e de Desenvolvimento Curricular.

Branco, I. M. (1993). Área-escola: um estudo de mudança? *Ler Educação, 11/12*, 189-193.

Bruner, J. (1977). *The process of education*. Harvard University Press.

Cibele, F. C. & **Branco**, I. M. (1992). Área escola: um espaço para a mudança? *Inovação, 6*(2), 191-204.

Denzin, N. K. & **Lincoln**, Y. S. (2018). *The Sage handbook of qualitative research*. Sage.

Durkheim, E. (1922). *Éducation et Sociologie*. Librairie Félix Alcan.

CIDREE (1998). *Across the Great Divides. Report of the CIDREE collaborative Project on Cross-Curricular Themes*. CIDREE.

CIDREE (2005). *Cross-curricular themes in secondary education. Report of a CIDREE collaborative project*. CIDREE.

Cosme, A. (2018). *Relatório: Projeto de autonomia e flexibilidade curricular (pafc): estudo avaliativo da experiência pedagógica desenvolvida em 2017/2018 ao abrigo do despacho nº 5708/2017*. Porto: Faculdade de Psicologia e de Ciências da Educação, Universidade do Porto.

Dewey, J. (1897). My Pedagogic Creed. *School Journal, 54*(3), 77-80.

Dewey, J. (1930). *Democracy an education*. The Mcmillan Company.

Dewey, J. (1997). *Experience and education*. Published by Simon & Schuster.

Harvey, D. (2008). Condição pós-moderna: uma pesquisa sobre as origens da mudança cultural. Ed. Loyola.

Hargreaves, D. H. (1991). Coherence and manageability: reflections on the National Curriculum and cross-curricular provision. *The Curriculum Journal, 2*(1), 33-41.

Heater, D. (2001). The history of citizenship in England. *The Curriculum Journal, 12* (1), 103-123.

Kerr, D. (1999). *Re-examining citizenship education: the case of England*. NFER.

Kerr, D. (2003) Citizenship Education in England: The Making of a New Subject. *Online Journal for Social Science Education, 2*, 1-10.

Kilpatrick, W. H. (1918). The Project Method: The Use of the Purposeful Act in the Education Process. *Teachers College Record, 19*, 319-335.

Lopes, A. C. & **Macedo**, E. (2011). *Teorias de currículo*. Cortez.

Lord P., **Harland** J. (2000). P*upils' Experiences and Perspectives of the National Curriculum: research Review*. NFER.

Maes, B., **Coninck**, C., **Sleurs**, W. & **Van Woensel**, C. (2001). *European Conference of Experts on cross-curricular themes in secondary education. Pre-conference document. Questionnaire Analysis*. European Conference of Experts on cross-s-curricular themes in secondary education, Brussels.

ME/DEB (2001). *Currículo nacional do ensino básico – Competências essenciais* [National curriculum for basic education – Essential competencies]. Ministério da Educação.

Morris, M. & **Schagen**, I. (1996). *Green attitudes or learned responses?* NFER.

Nóvoa, A. (1987). Le Temps des Professeurs. Junta Nacional de Investigação Científica.

Pacheco, J. A. (1994). Área escola: projeto educativo, curricular e didático. R*evista Portuguesa de Educação, (7)*1-2, 49-80.

Pinar, W. F., **Reynolds**, W. M., **Slattery**, P. &**Taubman**, P. M. (1995). *Understanding Curriculum: an Introduction to the Study of Historical and Contemporary Curriculum Discourses*. Peter Lang Publishing.

Roldão, M. C. (2000). O currículo escolar da uniformidade à contextualização – campos e níveis de decisão curricular. *Revista de Educação, (9)*1, 81-92.

Roldão, M. C., **Peralta**, H. & **Martins**, I. (2017). *Currículo do Ensino Básico e do Ensino Secundário. Para a construção de Aprendizagens Essenciais baseadas no Perfil dos Alunos*. https://www.dge.mec.pt/sites/default/files/Curriculo/Projeto_Autonomia_e_Flexibilidade/ae_documento_enquadr ador.pdf

Santomé, J. T. (1998). *Globalização e interdisciplinaridade. O currículo integrado*. Artes Médicas Sul.

Saunders, L., **Hewitt**, D. & **MacDonald**, A. (1995). *Education for live. The cross-curricular themes in primary and secondary schools*. National Foundation for Educational Research.

Schwab, J. J. (1983). The Practical 4: Something for curriculum professors to do. *Curriculum Inquiry, 13*(3), 239-265. http://www.jstor.org/stable/1179606

Caria, T. (1995). Que sentido e que organização para a Área escola? Uma abordagem sociológica. *Educação, Sociedade & Culturas, 3*, 57-71.

Tyack, D. & **Cuban**, L. (1995). *Tinkering toward Utopia: A Century of Public School Reform*. Harvard University Press.

Whitty, G., **Rowe**, G. & **Aggleton**, P. (1994a) Subjects and themes in the secondary school curriculum. *Research Papers in Education, (9)*2, 159-181, DOI: 10.1080/0267152940090203

Whitty, G., **Rowe**, G. & P. **Aggleton** (1994b). Discourse in Cross-curricular contexts: limits to empowerment. *International Studies in Sociology of Education, 4*(1), 25-42.

Young, M. F. D. (1971). *Knowledge and control. New directions for the sociology of education*. Collier-Macmillan.

Young, M. F. D. (1998). *The Curriculum of the Future From the 'New Sociology of Education' to a Critical Theory of Learning*. Routledge.

Young, M. F. D. (2010). The future of education in a knowledge society: The radical case for a subject-based curriculum. *Journal of the Pacific Circle Consortium for Education, (22)*1, 21-32

Legislation

Law No. 46/86, Diário da República, 1.ª Série, 237, 3067-3081.
Decree-Law No. 286/1989, Diário da República, Série I, 198, 3638-3644.
Decree-Law No. 6/2001, Diário da República, Série I-A, 15, 258-265.
Decree-Law No. 139/2012, Diário da República, Série I, 129, 3476-3491.
Decree-Law No. 139/2012, Diário da República, Série I, 129, 3476-3491.
Order No. 5908/2017, Diário da República, Série II, 128,13881-13890.
Decree-Law No. 55/2018, Diário da República, Série I, 129, 2928-2943.
Order No. 6478/2017, Diário da República, Série II, 143,15484-15484.
Order No. 6944-A/2018, Diário da República, 1º Suplemento, Série II, 138, 2.
Order No. 181/2019, Diário da República, Série I, 111, 2954-2957.
Order No. 8476-A/2018, Diário da República, 2º Suplemento, Série II, 168, 8-31.
Order No. 7169/2011, Diário da República, Série II, 245,12-23.
Order No. 181/2019, Diário da República, Série I, 111, 2954-2957.
Order No. 6173/2016, Diário da República, Série II, 90, 14676-14676.

Tensions and (re)transformations in the Portuguese Early Childhood Education curriculum

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ABSTRACT
Teaching and content are contested concepts in Early Childhood Education. By presenting teaching as encompassing different dimensions – organization of the educational environment and interactions – this chapter argues the need for deep and flexible content knowledge for Early Childhood teachers since recent research reveals the relevance of knowledge that permeates the social and material contexts of childhood. The same importance has been signaled for interactions between adults and children for expanding children's knowledge and their metacognitive awareness of learning. The chapter moves the discussion to the Portuguese curricular context, comparing the two versions of the curricular guidelines and discussing data from a national project about curriculum and assessment. The results stress the urgency of making content knowledge visible in the context and in children's play. When the specificity of teaching and content in Early Childhood Education is not highlighted, formal practices, mimicked from higher levels of education, take the place of a Pedagogy of Early Childhood. This might lead to less quality in practice and a loss in pedagogical richness.

KEYWORDS
Early Childhood Education, teaching, content knowledge, play.

1. Introduction

Early Childhood Education (ECE) has a long history and a rich and complex pedagogical tradition (Oliveira-Formosinho, 2007). In different countries, it is organized and enacted differently but international research and exchange have created a shared perspective on the quality of practices. A challenge that is perceived across different regions and countries is the connection to content knowledge and how that connection impacts teaching. Because of the historical reliance on children's development as a basis for professional knowledge, content has struggled to be relevant. Traditional emphases on learning through discovery, exploration, and play were associated with less attention to disciplinary forms of knowledge (i.e. subjects) around which

curricula are typically constructed (E. Wood & Hedges, 2016). In other areas of the world, the teachers are used to planning around content, but this has been seen as leading to a restriction on children's play to allow for adult-led activites. This means that both teaching and content are contested concepts in Early Childhood Education. The extent to which young children can and should engage with subject matter, concepts, and skills also remains contentious as learning processes have been viewed as more important than either content or outcomes (E. Wood & Hedges, 2016).

Recent research has shown the importance of content knowledge for ECE teachers to develop quality practices that make the most of children's experiences (Figueiredo, Gomes, et al., 2020; Hedges & Cooper, 2018; Kirkby et al., 2018; Oppermann et al., 2016; Trawick-Smith et al., 2016; E. Wood & Hedges, 2016). As for other teachers, the content knowledge in question needs to be deep and flexible, powerful and of epistemic quality (Gericke et al., 2018; Hudson et al., 2015; Hudson, 2018).

The specific challenge of ECE's transformation of that knowledge into teaching and learning is addressed in this chapter. First, by discussing the specificity of teaching in this context. Then, by looking into a particular curricular case – Portugal. The comparison of the two versions of the Curricular Guidelines, from 1997 and 2016, is complemented with a discussion of data from a national project about curriculum and assessment.

2. Early Childhood Education, teaching and content

When analysed internationally, Early Childhood Education is an arena for many diverse practices and perspectives across countries and cultures. For example, the publications *Starting Strong* (OECD Directorate for Education, 2001) and *Starting Strong II* (OECD Directorate for Education, 2006) showcase the diversity within contextualised realities of ECE services across OECD member states. Since the understanding of children and early childhood services is socially and culturally constructed, the connection between ECE and teaching is not an easy one, in some systems. This is due, partly, because of the dominant theoretical influence of Developmental and Educational Psychology over the years (Figueiredo, 2013; E. Wood & Hedges, 2016). Another factor is connected to conceptions about teaching as a formal activity, adult-centered and mostly restricted to knowledge.

Decades of research on teaching and learning, and strong theoretical and research traditions, have provided us with much richer and diverse views on what teaching can be. The recognition that teaching requires specialized and complex work from organizations and individuals has a long history. In this process, Hamilton highlights the split, in the 16th century, between the activity of teaching and the activity of defining what (and how) to teach, previously combined in the Latin word *doctrina*. In medieval teaching practices, "the social practices of teaching and the knowledge transmitted through teaching were synonymous. Formalized medieval teaching, therefore, was merely the faithful representation, organization, and transmission of accumulated and inherited teachings" (1999, p. 139). The distinction between the knowledge that is taught and the knowledge built on teaching, which allows knowing how to teach, is crucial to understand the

teaching profession since it is in the mediation between knowledge and the learner that the role of the teacher is established and justified (Roldão, 2005). The relationship between knowledge (or content), teacher, and the learner has been described as a triangle, since Herbart introduced, in the 19th century, this schematic representation of the triad present in teaching (Kansanen & Meri, 1999). The variations that have been proposed in relation to this triangle, from the designation – didactic or pedagogical – to the elements that are added to it – the community, the school organization, the curriculum – to the different emphases in the relationships established between the elements, are revealing of the evolution and profusion of theorizing about teaching. Different discursive and research traditions (pedagogy, didactics, *didaktik*, curriculum studies) have developed lexicons and conceptual bases to analyze and improve teaching. Together they form a legacy or theoretical heritage that should be considered in contemporary discussions, avoiding pendulum movements between extreme alternatives (Roldão, 2011) that only exhaust the complexity of knowledge, articulations, and reciprocity that is present in the traditions.

Roldão has strived to re-semantize teaching as the function of making/allowing someone to learn something that is socially acknowledged as relevant (Roldão et al., 2009). Teaching is, then, a set of interactions with an intention: to make someone aware of, or able to do, something he or she has not been/been able to do, before. Conceptualized in this way, teaching is an intentional activity, distinct even if complementary from the concept of learning (Pramling et al., 2019). This definition works well with Early Childhood Education's perspectives on the adult's role and on children's learning. The role of the content, or objects of learning, is one of the most contentious, when teaching is discussed in this context.

In definitions of Childhood Pedagogy, the role of knowledge that permeates the social and material contexts is usually placed in the background, with the exception of the reference to the type of learning (knowledge, skills, etc) that is to be promoted (Figueiredo, 2013). There were notable exceptions to this omission, as "The objects of learning have never been strong in preschool, with the exception of Froebel's pedagogy where mathematics was obvious, in Montessori where reading and writing in later preschool years became important and, finally, in High/Scope where defined key-notions constitute the learning object" (Pramling-Samuelsson & Carlsson, 2008, p. 629).

Against this state of affairs, more recently, the (minor) role of learning objects, that is, of content, has been discussed with renewed interest, even in Early Childhood Education perspectives that uphold the primacy of children's activity, their play. This discussion is supported by recent studies on children's knowledge, in semantic or content terms and not just structural or procedural ones, which reveal that children build nuclei of beliefs and systematic distinctions in specific domains of knowledge (Cullen, 2005; Hedges & Cooper, 2018; E. Wood & Hedges, 2016). The integration of sociocultural assumptions with this appreciation of learning content was well summarized by Hedges and Cullen:

> An increased focus on subject content learning is not incompatible with early childhood pedagogy and philosophy, particularly if the content relates to children's interests. (...) The sociocultural view of children as capable and competent, the central mediating role of dialogue, and the intersubjective nature of the reciprocal and responsive relationships highlighted in early childhood pedagogy support an argument that purposeful teaching and learning occur when

> teachers' subject knowledge contributions to appropriate pedagogical strategies and meaningful learning experiences for children. (2005, p. 77)

2.1. Teaching in Early Childhood Education

Barnett's definition highlights that teaching is persistent and adaptive, not dogmatic or authoritarian (1973, as cited in Pramling et al., 2019, p. 21). Conceptualizing teaching as an intentional activity that adapts to the learner/s and has a purpose opens the range of actions and decisions involved in teaching. This is particularly important for Early Childhood Education which includes children from 0 to 6 or 8 years old.

Three main axes sustain the teaching in ECE: 1) organization of the learning environment or "backstage" (including decisions about physical space and resources, time, groupings, social interactions and relationships), 2) tasks or activities presented and directed by the teacher, and 3) interactions between adult and child focusing the child's activity, during play (for example) (Figueiredo, Gomes, et al., 2020; Ministério da Educação, 2016; Moyles et al., 2002; Siraj & Asani, 2015; Siraj-Blatchford, 2010).

The learning environment is essential for ECE teaching. It is considered a "third teacher" (Edwards et al., 2016) in some curricula and approaches, particularly Reggio Emilia. The environment is intentionally organized to promote relationships, communication, collaboration, and exploration through play. Resources and materials are chosen and made available to promote creativity, thinking and problem-solving skills, questions, experimentation, and open-ended play. Materials and spacial organization can make use of literacy or mathematical contents in relevant ways by enriching play (Figueiredo, Menezes, et al., 2020). Content is, therefore, included in children's activity through the environment: not only in physical dimensions but also interpersonal ones. For example, research on children's play reveals how children deal with mathematical content brought into the play by other children (Figueiredo, Menezes, et al., 2020; Worthington, 2020).

In terms of the interactions, an essential aspect is that exchanges between adults and children about content do not only focus on expanding children's knowledge but also on their metacognitive awareness of learning and the process by which they learned. The creation of social learning contexts in which reflective conversations can be developed, through forms of support such as scaffolding (Maryam et al., 2020; D. Wood et al., 1976), sustained shared thinking (Siraj & Asani, 2015) or guided participation (Pridham et al., 2018; Rogoff, 2005), using cultural tools, implies deep professional knowledge based on sociocultural perspectives of development and Childhood Pedagogy, but also cultural tools and the content that substantiates learning.

Research has also highlighted how teachers' lack or inadequacy of knowledge of a certain area of the curriculum can harm children's learning by leading to opportunities that are not explored (Siraj-Blatchford, 2010; Siraj-Blatchford et al., 2002), while the security felt in this context leads to a greater probability of recognition and learning enhancement in children's play experiences (Hedges, 2012). Yet, studies show that ECE teachers underestimate the importance

of discipline-specific subject or content knowledge even though they use it to add depth to children's learning during play and can use pedagogical content knowledge for organizing learning environments (Figueiredo, Gomes, et al., 2020; Hedges & Cullen, 2005; Kirkby et al., 2018; Oppermann et al., 2016; Trawick-Smith et al., 2016).

The specificity of teaching by articulating the three axes warns against adapting didactics from other levels of teaching to ECE (Pramling-Samuelsson & Carlsson, 2008; Pramling-Samuelsson & Fleer, 2009; Pramling-Samuelsson & Sheridan, 2010). Other existing practices also show limitations regarding this complexity. For example, commercially-based programs and ready-made activities or materials rarely consider the three axes together and don't include content knowledge in the provided information (Lopes, 2011). Through ECE curriculum documents, content has also become part of the alignment of preschool/ECE and compulsory education policy, and of ensuring that children achieve educational and school readiness goals, which, in turn, contribute towards longer-term economic and sociopolitical goals (E. Wood & Hedges, 2016). This is usually connected to the conception that the early introduction of formal approaches to teaching is desirable in order for children to learn in ways that are expected and demanded in compulsory schooling which goes against the specificity of teaching in ECE.

Therefore, it is worth noting that the valorization of learning objects focused during play and interactions is different from what Oliveira-Formosinho and Formosinho (2011) reject as "knowledge considered essential and immutable" (p. 14), leading to "memorization of contents and their reproduction" (p. 14). The distinction lies not only in the pedagogical appropriation of knowledge but also in the view of knowledge itself when a sociocultural perspective is assumed. The way of conceiving the content of learning is essential. Teaching is not about transferring knowledge from society to the learner, nor from scientific discipline to school, but rather using knowledge as a potential tool for transformation that allows the individual to build himself subjectively and intersubjectively (Figueiredo, 2013).

3. Early Childhood Education in Portugal

Early Childhood Education (ECE) has become a part of educational systems across the world, but a large number of children still don't access it (UNICEF, 2019). The global priority placed on ECE is underscored with targets of the United Nations Sustainable Development Goal 4 (United Nations, 2017) pertaining to ensuring that all girls and boys have access to quality early childhood development, care, and preprimary education. The place and importance of ECE vary across different countries but research suggests that high-quality early childhood education and care is associated with children's development and learning, with especially strong evidence in the case of disadvantaged children (OECD, 2018). Early Childhood Education is also a dynamic area of research where different disciplines and research agendas come together.

In terms of provision, the diversity can be found: in terms of age range, from 0 to 8 years old; in terms of purpose, educational or connected to social affairs; in terms of the qualification required of the professionals and their designation: teacher, educator, pedagogue, childcare practitioner, pedagogical staff; but also in terms of the structure and purpose of the institutions

where the provisions are offered, including schools; and in terms of the existence of curricular or pedagogical guidance. This diversity is also linked to other factors like funding, governmental oversight, and policy priorities.

In Portugal, ECE includes preschool education, from 3 to 6 years old, which is part of the educational system, considered the first stage of Basic Education, but not mandatory. Before 3 yo, children and families have social provision in the form of *creches* and *amas*. For this chapter, we will focus on preschool education, described as the foundational structure for lifelong learning (Portugal, 1997). The national preschool education network consists of public and private sector settings, as well as cooperative (for-profit) and private social solidarity institutions, charities, and mutual associations (not-for-profit). Children attend preschool included in one group of up to a maximum of 25 children and there is a ratio of one assistant and one teacher per group. Although not mandatory, preschool has high attendance rates: in 2018/2019, 83.7 % for three-years-old, 95.4 % for four-years-old, and 97.7 % for five-years-old (Direção-Geral de Estatísticas da Educação e Ciência, 2020).

The ECE teachers, named *educadores/as de infância*, have a higher education degree, since the late 1980s. The required qualification has been the same for primary teachers since then and, in 1997, became the same as all teachers in the educational system. With the changes in initial teacher education and access to the teaching career in 2007, the minimum requirement became a Master's Degree. ECE teachers also have the same career status (since the 1990s) and professional profile (since 2001) as the other teachers in the school system. ECE teachers are recognized as curriculum designers, based on the existing national guidelines (Ministério da Educação, 1997, 2016). The objectives of ECE in Portugal, as stated in official policy discourse, are centered on promoting the child's personal and social development based on democratic life experiences within a perspective of education for citizenship (Ministério da Educação, 2016). Portuguese ECE guidelines open the possibility of using different pedagogical approaches. Such autonomy contributes to the current diversity of services and practices in Portugal.

4. Changes between 1997 and 2016 in ECE and Teacher Education in Portugal

Both versions of the Portuguese Curricular Guidelines (Ministério da Educação, 1997, 2016) view teachers' intervention or pedagogy as enacted through the organization of the learning environment and the planning of activities. When organizing the learning environment and planning educational activities, the teacher should create opportunities for learning in all content areas, mostly based on the child's involvement with the environment and other children. Evaluation is key for planning and for the relationship with the children. It should be holistic, diverse in sources and instruments, and focused on learning and improvement of the response to children. Another strong idea of both versions is the close proximity to families and communities. Articulating all the interventions of the ECE teacher is the concept of educational intentionality that should guide decisions and actions in a reflexive way.

The Guidelines intend to improve the quality of ECE but also to facilitate educational continuity (family to ECE and ECE to primary). In 1997, another purpose was to guarantee greater

visibility to ECE practices by showcasing its complexity, theoretical foundation and great contribution to children's development and learning as the document reflected the existing professional knowledge about the field.

Both versions of the Portuguese Curricular Guidelines (Ministério da Educação, 1997, 2016) present three content areas that serve as references for curriculum planning and evaluation: Personal and Social Development, Knowledge of the World and Expression and Communication, including Mathematics, Physical Education, Artistic Education, and Oral and Written Language. Although there are different curricular areas, the emphasis is on articulation and connections between them.

The 2016 version of the Guidelines explicitly values children's play, together with the concept of a structured pedagogy that was introduced by the 1997 version. Whereas in 1997 the focus was on making the ECE pedagogy visible – teachers doing more than "letting children play" – in 2016 the need is to reopen space for play as central in the educational practices. The new version again emphasizes a holistic curriculum, valuing different areas of knowledge. Children are perceived as active subjects, capable of participating in decisions. Democratic values and experiences are clearly valued.

When the current framework for preschool was established in 1997, considering it the first stage of Basic Education, it was important to safeguard pedagogical diversity and specificity. One common document needed to cater to different ways of developing ECE that existed. The policy tried to establish coherence to shared purposes and values but not uniformity in procedures. Currently, there are different challenges to this principle. Some changes in the school system can be connected to this.

In public schools, the creation of administrative groups or clusters *(agrupamentos)* combining several schools, from preschool to secondary education, was enacted. These clusters are primarily vertical (from preschool to 2nd cycle of basic education, ranging from 3 to 12 years old; or from preschool to secondary school, from 3 to 18 years old). Clusters can be understood as functioning as pyramidal networks, which means that a decision center is created – the school headquarters which usually is a post-primary or secondary school – to which a series of peripheral schools are associated, namely preschools and primary schools (Castro, 2010). This situation has provided the conditions for cultural assimilation of preschool by primary (and other levels of) school. Studies on this relationship have indicated that preschool pedagogical culture has been overtaken by normative guidance that prefers a transmissive pedagogy (Formosinho, 2017). This has also led to less diversity of practices and less autonomy for the professionals against stronger administrative control, standardization of curricular tools and projects, and bureaucracy. This is visible in shared curricular projects/activities plans for all the groups in one *agrupamento*, standardized lesson plans, demands for written summaries of classes, timetables with content areas distributed, and the adoption of official textbooks for preschool. Some of these practices are common and justified in other levels of education but, for preschool, they represent a diminishing relevance of play, pedagogical documentation, emergent curriculum development, and openness. The ECE is becoming less resilient, less flexible, and less connected to other actors in the system, namely families. It is also retreating in terms of establishing what a quality response to children should be.

In society, several versions of what children "should" learn in preschool are becoming visible, influencing families and professionals. There is also a plethora of programs and books, apps, toys, etc. that provide their own version of what is of value for children. These pressures are accompanied by a vocabulary that erodes the specificity of ECE: *ensino* instead of educação, calling children's groups by the same name as groups in primary *(turmas)*, naming a child a pupil (Vilarinho, 2020). For the Portuguese system, these are losses as previously the terms used *(educação, grupo, criança)* were specific to ECE and therefore marked the difference in terms of purpose and perspective.

From 2002 onwards, another change in the educational system was the establishment of the External School Evaluation System (EES) covering preschool education and basic and secondary education. Since 2005 the responsibility for the implementation of the EES has been attributed to the General Inspectorate for Education and Science (IGEC). After the implementation of the EES pilot project, between 2005 and 2006, the first EES cycle (2006-2011) was developed, followed by a second EES cycle (2011-2017) and currently, the EES system is on its third implementation cycle, after the completion of a new pilot phase in 2018. The first step of the EES is the school self-evaluation followed by the visit of the external team of experts. A recent study revealed how, for early Childhood Education teachers, EES practices can be challenging because of the focus on school results and the expectation of standardized practices (J. Sousa & Pacheco, 2021).

Other changes in place since 1997 are the enlargement of time spent in school by children, named "Full-time school" policy. It added, to the five hours spent with the teacher, socio-educative services for supporting the families. This has meant that children can enter schools an hour before the activities, have lunch at school, and stay up to three hours after the end of the activities. The amount of time spent in the same context/institution, the lack of conditions for active, playful, and rich activities, and the reduction of family and peer-to-peer interactions have been side effects of this policy (Neto, 2020). Another restructuring that happened is the concentration of preschools and primary schools in school centers. The small, community schools have been closed in favor of this offer that aggregates resources and geographically concentrates the education institutions. School centers have represented smaller and more conventional spaces as classrooms for ECE, with restrictions in terms of outdoor space as well, but also a larger distance from the communities. These changes have impacted the specificity of ECE pedagogy. On the other hand, the school centers have created conditions for collaboration and supervision between peers. Teachers value the proximity of colleagues but also highlight challenges of this situation (Miranda et al., 2022; Miranda & Seabra, 2019).

These, and other, changes in the Portuguese educational system are aligned with larger shifts. For example, Starting Strong, the OECD publication focusing on early years services and key indicators on ECE, has shifted from contextualized and child-sensitive studies to more quantitative and outcome-focused studies with a greater focus on economic and psychological metrics with the aim of establishing 'what works' – not within particular contexts and realities, but for all (D. Sousa et al., 2019). This drive to find transferable and context-independent reliable information and prescriptions also overrides the possibilities of context-specific pedagogies.

In terms of teacher education, the 1997 guidelines were published at the same time an important change happened in the system: ECE teachers (and primary) entering qualification was

changed to the same as all teachers in the system. The professional profile and status are the same as well, but it was in 1997 that the *licenciatura* – higher education, 4 years long degree – became the minimum qualification for being an ECE teacher (Cardona, 2006; Figueiredo & Roldão, 2005; Roldão, 2002). From the previous Bachelor's degrees, higher education institutions (universities and polytechnics) developed programs dedicated to preparing ECE teachers to work with children from 0 to 6 years old.

Until 2016, and the second version of the guidelines, a major change happened as the initial qualification for all teachers was changed to a Master's degree in 2007. ECE teacher education is no longer a dedicated path as future teachers enter a degree in Basic Education that splits into different Masters programs. Basic Education entails ECE, primary and second cycle (0-12 years old) and the degree is focused on content knowledge (125/180 ECTS). It's only at Master's level that ECE specificity is brought into teacher education with didactics and *practicum* experiences (Figueiredo, Gomes, et al., 2020). Most of the programs offered are ECE and primary combined and last two years (120 ECTS). This option has the potential to promote better understanding, communication, and curricular articulation between ECE and primary but it also entails the risk of limiting space for and knowledge about ECE pedagogy (or didactics).

These were some of the changes in policy and school context that mediated the two versions of the guidelines. As Vilarinho (2020) puts it, the 2016 Guidelines were counter-cyclical to what have been the policies and choices made for the educational system and preschool in Portugal and internationally.

5. Tensions and (re)transformations

In 2017-18, as support for the publication of the new Guidelines, the Ministry of Education developed a national wide training initiative that started more than 50 training groups of more than 500 ECE teachers from both public and private schools. The sessions followed the parts of the document and were based on the discussion of artifacts from practice that the teachers brought in. From those, the discussions included perspectives on and ways of doing pedagogy in ECE. Several curricular projects, lesson plans, children's portfolios, pedagogical documentation, and reports were analyzed and transformed into learning. The trainers involved were local but gathered frequently to discuss the sessions and the relevance of the Guidelines – for practice and as a way of promoting knowledge building. From those meetings, some common trends started to be salient.

A first trend, that was interpreted as tension, was how planning and assessment were being perceived as bureaucratic. As ECE departments, formed under school clusters, attempted to articulate several professionals working in different schools, diversity was lost and replaced with forms that were to be used by everyone. This was reported by all the teachers as well as the imposition, in some cases, of structures for planning that were alien to ECE, being handed down from primary or higher levels of education. The biggest tensions were about assessment. Children's evaluation as understood by ECE documents and guidelines – formative, diverse, focused on processes, participated – was being replaced by grades and common tasks that all

children had to answer to be assessed "fairly". This translation of the test into a working sheet was common and felt like a violation of pedagogical values. Grading children and communicating grades to parents, instead of reports on learning and pedagogical documentation on the activities (and learning), was not very much widespread but was happening in some of the schools.

The dimension of planning and evaluation as professional decision-making was being reduced to the intimate space of direct interaction with children on a daily basis. Teachers were working with a double profile: the ECE teacher when with the children, and the school cluster teacher when answering demands that were foreign and inadequate. This was connected to teachers distancing themselves from the curricular instruments and documents as a response to the strong pressures to have same the procedures and documents as other school levels and for the whole department of ECE.

A second trend, again a tension, refers to the learning environment (space and materials, time and relationships) that was not being considered in planning and evaluation. Teachers highly valued the decisions and the use of the learning environment for working with the children but realized they did not include it in the formal planning documents or in the discussions about planning. Instead of a dimension of teaching, it had stopped being part of what was considered when planning for teaching. This was connected to a restriction of the planning to adult-led activities where the adult's agency is in focus (Liljestrand, 2021). Still, the learning environment (space and materials) was easily perceived as an arena for children's participation. This means that when asked to think pedagogically ("how can we support children's participation?"), the learning environment was included but that the formality and disconnection with the existing curricular documents made them set aside this important dimension of teaching. A connection between children's participation and the learning environment is a common one for ECE pedagogies (Oliveira-Formosinho, 2012; Tomás, 2017) and it was a way to expand the concept of planning (and teaching) for the teachers in the sessions. Since the 2016 version of the guidelines strongly values children's rights, highlighting participation, this was an interesting development during the training that can be seen as a (re)transformation: bringing a renewed focus on participation allowed for a more diverse, inclusive, and powerful perspective on teaching. The way content was approached was different: for content areas and desired learning outcomes, teachers would more easily think of adult-led activities than make suggestions for the learning environment.

The learning environment is also crucial for play. The third trend connects them both: play was seen as deeply rooted as part of what children should do during ECE and the affordances of the learning environment were recognized as part of what the ECE teacher can do to support play. The re-valuing of outdoor spaces and learning in the previous years was something that teachers brought into the discussion and described as a (re)transformation. It was introduced as something that used to be done but was now more constrained. As many authors and institutions were promoting outdoor play, the sort of experiences and values connected to that were being discussed again. Even with the valuing of play, there were tensions around its role in ECE as it was perceived as disconnected from adult-led time. Teachers would identify the learning that occurs when children are playing but were less at ease (although very interested) in thinking about organizing space and materials, and relationships, for promoting learning through play.

The new guidelines clearly advocate for play and suggest roles for the adult regarding play, one of which found resonance with what teachers value in their practice: observation. As with planning, teachers came to realize observation is a strong practice and basis for decision and action even if not reflected or written down – and therefore not taken into account when the discussion is about planning and evaluation.

This "split" professional knowledge – ECE pedagogy in the context with the children and bureaucracy and formality for the school cluster – was found throughout the groups nationwide. The tensions can be summed up as educational intentionality being overpowered by institutional constraints. The (re)transformations are ways of reconnecting with the tenets of ECE pedagogy and the particularities of enacting teaching in ECE. Changing from a compliance curricular mindset to professional decision-making is not easy (F. Sousa, 2013).

6. Conclusion

Content knowledge is essential at all levels of education. It is the subject matter with which we can perform the transformations schools promise: learning. Due to specificities in the way of teaching, ECE can sometimes have a difficult relationship with content but there are many other factors influencing curricular decisions. In this text, the tensions resulting from those factors were in the front as they are pressuring pedagogy and curricular development but the (re) transformations were also observed.

The tensions and (re)transformations in ECE in Portugal point to opportunities that the curricular guidelines support. First, by valuing teaching as three-dimensional: organizing the learning environment, interacting with children (particularly during play) and leading activities. Two are based on children's agency, the third more on the adult's (Liljestrand, 2021) but they are all important. Secondly, by connecting evaluation/assessment and teaching practices while focusing the decision-making aspect more than the formal one. This is necessary as the diverse nature of teaching requires sophisticated planning and a readiness to listen to children and create spaces for participation – but also sophisticated forms and tools of evaluation. A third aspect is the way the guidelines consider children's play to be framed by adults' intentionality not creating a divide between the two. Based on these, content is part of the planning and of children's experience without overtaking the specificity of the ways of teaching and learning in ECE.

References

Cardona, M. J. (2006). *Educação de infância – Formação e desenvolvimento profissional*. Edições Cosmos.

Castro, D. (2010). *A Gestão Intermédia nos Agrupamentos de Escolas. Os Coordenadores de Estabelecimento e as Lideranças Periféricas* [Tese de Doutoramento em Ciências da Educação]. Universidade de Aveiro.

Cullen, J. (2005). Children's knowledge, teachers' knowledge: Implications for early childhood teacher education. *Australian Journal of Teacher Education, 24*(2), 13–27.

Direção-Geral de Estatísticas da Educação e Ciência. (2020). *Educação em Números – Portugal 2020 [Education in Numbers – Portugal 2020]*. Direção-Geral de Estatísticas da Educação e Ciência (DGEEC).

Edwards, C., **Gandini**, L. & **Forman**, G. (Eds.). (2016). *As cem linguagens da criança. A abordagem de Reggio Emília na educação da primeira infância: Vol. I*. Penso.

Figueiredo, M. P. (2013). *Práticas de produção de conhecimento: A investigação na formação inicial de educadores de infância [Knowledge production practices: Research in initial early childhood teacher education]* [PhD Thesis in Education, spec. in Didactics and Curriculum Development]. University of Aveiro.

Figueiredo, M. P., **Gomes**, H. & **Rodrigues**, C. (2020). Mathematical pedagogical content knowledge in Early Childhood Education: Tales from the 'great unknown' in teacher education in Portugal. In B. Perry & O. Thiel (Eds.), *Innovative approaches in early childhood mathematics* (pp. 535–546). Routledge.

Figueiredo, M. P., **Menezes**, L., **Gomes**, H., **Martins**, A. P., **Ribeiro**, A., **Marchese**, M., **Soares**, I. & **Zhang**, L. (2020). 'It's a lot of work': A tailor's measuring tape in the dollhouse. In O. Thiel, E. Severina, & B. Perry (Eds.), *Mathematics in Early Childhood Research, Reflexive Practice and Innovative Pedagogy* (pp. 79–94). Routledge.

Figueiredo, M. P. & **Roldão**, M. C. (2005). Significado e processo de aprender a ensinar: Um estudo fenomenográfico sobre conceções de formandos de uma licenciatura em educação de infância. *Revista de educação, XIII*(2), 69–98.

Formosinho, J. (2017). A organização da educação de infância e da educação primária no quadro da educação básica. In *Lei de Bases do Sistema Educativo: Balanço e prospetiva – Volume I* (pp. 319–334). Conselho Nacional de Educação.

Gericke, N., **Hudson**, B., **Olin-Scheller**, C. & **Stolare**, M. (2018). Powerful knowledge, transformations and the need for empirical studies across school subjects. *London Review of Education, 16*(3), 428–444. https://doi.org/10.18546/LRE.16.3.06

Hamilton, D. (1999). The Pedagogic Paradox (or why no Didactics in England?). *Pedagogy, Culture & Society, 7*(1), 135–152.

Hedges, H. (2012). Teachers' funds of knowledge: A challenge to evidence-based practice. *Teachers and Teaching: Theory and Practice, 18*(1), 7–24.

Hedges, H. & **Cooper**, M. (2018). Relational play-based pedagogy: Theorising a core practice in early childhood education. *Teachers and Teaching, 24*(4), 369–383. https://doi.org/10.1080/13540602.2018.1430564

Hedges, H. & **Cullen**, J. (2005). Subject knowledge in Early Childhood curriculum and pedagogy: Beliefs and practices. *Contemporary Issues in Early Childhood, 6*(1), 66–79.

Hudson, B., **Henderson**, S. & **Hudson**, A. (2015). Developing mathematical thinking in the primary classroom: Liberating students and teachers as learners of mathematics. *Journal of Curriculum Studies, 47*(3), 374–398. https://doi.org/10.1080/00220272.2014.979233

Hudson, B. (2018). Powerful knowledge and epistemic quality in school mathematics. *London Review of Education, 16*(3), 384–397. https://doi.org/10.18546/LRE.16.3.03

Kansanen, P. & **Meri**, M. (1999). The Didactic relation in the teaching-studying-learning process. In B. Hudson, F. Buchberger, P. Kansanen, & H. Seel (Eds.), *Didaktik/Fachdidaktik as science(s) of the teaching profession?* (pp. 107–116). TNTEE.

Kirkby, J., **Keary**, A. & **Walsh**, L. (2018). The impact of Australian policy shifts on early childhood teachers' understandings of intentional teaching. *European Early Childhood Education Research Journal, 26*(5), 674–687. https://doi.org/10.1080/1350293X.2018.1522920

Liljestrand, J. (2021). Like school and not like school: Ambivalences in Swedish preschool teachers' enacted policy. *Nordic Journal of Studies in Educational Policy, 7*(1), 44–52. https://doi.org/10.1080/20020317.2020.1789405

Lopes, A. S. (2011). *Revistas de divulgação pedagógica: Influência no desenvolvimento e Inovação curricular na Educação Pré-Escolar* [Dissertação de Mestrado em Estudos da Criança – Área de Integração Curricular e Inovação Educativa, não publicada]. Universidade do Minho.

Maryam, B., **Sören**, H. & **Gunilla**, L. (2020). Putting Scaffolding Into Action: Preschool Teachers' Actions Using Interactive Whiteboard. *Early Childhood Education Journal, 48*(1), 79–92. https://doi.org/10.1007/s10643-019-00971-3

Ministério da Educação. (1997). *Orientações curriculares para a educação pré-escolar [Curricular Guidelines for Preschool Education]*. Ministério da Educação.

Ministério da Educação. (2016). *Orientações curriculares para a educação pré-escolar [Curricular Guidelines for Preschool Education]*. Ministério da Educação.

Miranda, H. & **Seabra**, F. (2019). Centros escolares e supervisão colaborativa: Perspetivas quanto ao contributo para o desenvolvimento profissional e a melhoria das práticas pedagógicas – um estudo em curso. *Dialogia, São Paulo*, 33, 143–159.

Miranda, H., **Seabra**, F. & **Abelha**, M. (2022). Centros escolares, supervisão pedagógica e colaborativa: Perspetivas de educadores de infância e professores do primeiro ciclo do ensino básico [School centers, pedagogical and collabo-

rative supervision: perspectives of preschool and first cycle of basic education teachers]. *Indagatio Didactica, 14*(1), 165–186. https://doi.org/10.34624/ID.V14I1.29638

Moyles, J. R., **Adams**, S. & **Musgrove**, A. (2002). *Study of Pedagogical Effectiveness in Early Learning*. Queen's Printer.

Neto, C. (2020). *Libertem as crianças. A urgência de brincar e ser ativo.* Contraponto.

OECD (Ed.). (2018). *Engaging Young Children: Lessons from research about quality in early childhood education and care*. OECD.

OECD Directorate for Education. (2001). *Starting strong: Early childhood and care*. OECD.

OECD Directorate for Education. (2006). *Starting strong II: Early childhood and care*. OECD.

Oliveira-Formosinho, J. (2007). Pedagogia(s) da infância: Reconstruindo uma práxis de participação [Childhood Pedagogy(ies): Reconstructing a participatory praxis]. In J. Oliveira-Formosinho, T. Kishimoto, & M. Pinazza (Eds.), *Pedadagogia(s) da infância. Dialogando com o passado, construindo o futuro* [Childhood Pedagogy(ies). Dialogues with the past, building the future] (pp. 13–36). Artmed Editora.

Oliveira-Formosinho, J. (2012, Setembro). *Participatory educational environments: A challenge to educators' pedagogic imagination*. 22nd European Early Childhood Education Research Association (EECERA) Conference «Pre-birth to three: identities, learning, diversities», Porto, Portugal.

Oliveira-Formosinho, J. & **Formosinho**, J. (2011). A perspetiva pedagógica da Associação Criança: A pedagogia-em-participação. In J. Oliveira-Formosinho & R. Gambôa (Eds.), *O trabalho de projeto na pedagogia-em-participação* (pp. 11–45). Porto Editora.

Oppermann, E., **Anders**, Y. & **Hachfeld**, A. (2016). The influence of preschool teachers' content knowledge and mathematical ability beliefs on their sensitivity to mathematics in children's play. *Teaching and Teacher Education, 58*, 174–184. https://doi.org/10.1016/j.tate.2016.05.004

Portugal. (1997). *Preschool Education Framework Law.* Law No. 5/97.

Pramling, N., **Wallerstedt**, C., **Lagerlöf**, P., **Björklund**, C., **Kultti**, A., **Palmér**, H., **Magnusson**, M., **Thulin**, S., **Jonsson**, A. & **Pramling Samuelsson**, I. (2019). *Play-Responsive Teaching in Early Childhood Education*. Springer International Publishing Imprint, Springer. http://link.springer.com/10.1007/978-3-030-15958-0

Pramling-Samuelsson, I. & **Carlsson**, M. A. (2008). The playing learning child: Towards a pedagogy of early childhood. *Scandinavian Journal of Educational Research, 52*(6), 623–641.

Pramling-Samuelsson, I. & **Fleer**, M. (2009). *Play and learning in Early Childhood settings. International perspectives*. Springer.

Pramling-Samuelsson, I. & **Sheridan**, S. (2010). A turning point or a backward slide: The challenge facing the Swedish preschool today. *Early Years: An International Research Journal, 30*(3), 219–227.

Pridham, K. F., **Scott**, A. & **Limbo**, R. (2018). Guided Participation Theory for Teaching and Learning in Clinical Practice. In K. F. Pridham, R. Limbo, & M. M. Schroeder (Eds.), *Guided Participation in Pediatric Nursing Practice* (1st Ed.). Springer Publishing Company. https://doi.org/10.1891/9780826140449.0001

Rogoff, B. (2005). *A natureza cultural do desenvolvimento humano*. ArtMed.

Roldão, M. C. (2002). A universitarização da formação de educadores de infância e professores do 1.º Ciclo – Uma leitura de significados. *Infância e educação. Investigação e práticas, 4*, 36–41.

Roldão, M. C. (2005). Formação de professores, construção do saber profissional e cultura da profissionalização: Que triangulação? In L. Alonso & M. C. Roldão (Eds.), *Ser professor do 1.º Ciclo: Construindo a profissão* (pp. 13–26). Edições Almedina.

Roldão, M. C. (2011). Currículo e Didáticas – Percursos do conhecimento profissional. In *Um currículo de currículos* (pp. 47–54). Edições Cosmos.

Roldão, M. C., **Figueiredo**, M. P., **Luís**, H. & **Campos**, J. (2009). O conhecimento profissional dos professores – especificidade, construção e uso. Da formação ao reconhecimento social. *Revista Brasileira de Formação de Professores, 1*(2), 138–177.

Siraj, I. & **Asani**, R. (2015). The role of sustained shared thinking, play and metacognition in young children's learning. In S. Robson & S. F. Quinn (Eds.), *Routledge International Handbook of Young Children's Thinking and Understanding* (pp. 403–415). Routledge.

Siraj-Blatchford, I. (2010). A focus on pedagogy. Case studies of effective practice. In K. Sylva, E. Melhuish, P. Sammons, I. Siraj-Blatchford, & B. Taggart (Eds.), *Early childhood matters. Evidence from the Effective Pre-school and Primary education Project* (pp. 149–165). Routledge.

Siraj-Blatchford, I., **Sylva**, K., **Muttock**, S., **Gilden**, R. & **Bell**, D. (2002). *Researching effective pedagogy in the early years*. Queen's Printer.

Sousa, D., **Grey**, S. & **Oxley**, L. (2019). Comparative international testing of early childhood education: The democratic deficit and the case of Portugal. *Policy Futures in Education, 17*(1), 41–58. https://doi.org/10.1177/1478210318818002

Sousa, F. (2013). Portugal – The mirage of curricular autonomy. In W. Kuiper & J. Berkvens (Eds.), *Balancing curriculum regulation and freedom across Europe. CIDREE Yearbook 2013* (pp. 189-). SLO Netherlands Institute for Curriculum Development.

Sousa, J. & **Pacheco**, J. A. (2021). *External Evaluation of Schools (EES) in Portugal and the perceptions of the Kindergarten Teachers*. European Conference on Educational Research 2021, Geneva and online.

Tomás, C. (2017). Para além de uma visão dominante sobre as crianças pequenas: Gramáticas críticas na educação de infância. *Revista Humanidades & Inovação, 4*(1), 13–20.

Trawick-Smith, J., **Swaminathan**, S. & **Liu**, X. (2016). The relationship of teacher–child play interactions to mathematics learning in preschool. *Early Child Development and Care, 186*(5), 716–733. https://doi.org/10.1080/03004430.2015.1054818

UNICEF. (2019). *A world ready to learn prioritizing quality early childhood education*. United Nations Children's Fund. https://www.unicef.org/reports/a-world-ready-to-learn-2019

United Nations. (2017). *Resolution adopted by the General Assembly on 6 July 2017, Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development*. (A/RES/71/313).

Vilarinho, E. (2020). Articulações entre o público e o privado na educação de infância em Portugal. *Educação em Revista, 36*, e231420. https://doi.org/10.1590/0102-4698231420

Wood, D., **Bruner**, J. S. & **Ross**, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychiatry and Psychology, 17*(2), 89–100.

Wood, E. & **Hedges**, H. (2016). Curriculum in early childhood education: Critical questions about content, coherence, and control. *The Curriculum Journal, 27*(3), 387–405. https://doi.org/10.1080/09585176.2015.1129981

Worthington, M. (2020). Mathematical Signs and their Cultural Transmission in Pretend Play. In A. MacDonald, L. Danaia, & S. Murphy (Eds.), *STEM Education Across the Learning Continuum* (pp. 45–65). Springer Singapore. https://doi.org/10.1007/978-981-15-2821-7_4

Curriculum Studies: a european note on non-epistemological crisis in an era of accountability policies

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ABSTRACT

Reading the latest articles about curriculum theory we analyze several ideas on the discussion of the knowledge to the hypothetical end of the crisis in the field of curriculum studies. The historical moment of the field is under the divergences introduced from theoretical perspectives. We explore in the paper the discussion about the knowledge to answer to different and divergent questions in an increasingly globalized society. Accountability and performativity are two central concepts as well as curriculum policies and curriculum practices. The curriculum is now based on performance and standards. As Pinar claims, the discussion of the curriculum as a complicated conversation needs to be considered.

KEYWORDS

Curriculum studies, globalization, accountability, performativity, knowledge.

Introduction

In an exceptional book about the effects of globalization into educational systems, Taubman (2009, p. 13) asserts what it is running inside schools:

> None of us, who teach, regardless of the educational level, are immune to the effects of the transformation taking place. It reaches into the corners of our practices, constricts our daily life in schools, and influences how we think about what we do in our classrooms. It dictates how we spend at least some of our professional time, how our work is evaluated, and how we determine the meaning of our work.

These effects on the micropolitics of the schools and classrooms are presently acknowledged as a nightmare process due to transnational forms of regulation. The national level is embedded in global practices, especially when the common and convergent decisions are imposed as good governance. More specifically, governance by numbers circumscribes curriculum policies

by accountability. Looking at the transnational and supranational organizations, in line with global perspectives, the nations are persuasively coerced into "borrowing the world model and where they freely embrace it... the world model really matters in spite of the power of local cultures, been supported yet by extensive research" (Anderson-Levitt, 2008, p. 363). The democratically elected members of national governments coexist with unelected technicians of organizations that enforce common policies as well as on behalf of market regulation logic and knowledge-based economy. What kind of knowledge is this?

It is a competency knowledge constituted by information and social relations, preparing for employment and its professional permeability.

If the post-modern perspectives introduced other notion of knowledge, away "from the sacred tradition", as says Young (2013, p. 103), the knowledge-based approach curriculum does mean the end of the epistemological crisis on curriculum theory?

In Young's words, the answer is yes, but despite their pertinent arguments it is necessary to critically analyze that knowledge involves a complex discussion. He suggests: the crisis in curriculum theory is encouraged by "the increasingly widespread acceptance among educational researchers of the idea that knowledge itself has no intrinsic significance" (2013, p. 106).

Such discussion does not mean the end of the epistemological crisis of the curriculum field, only its affirmation as the identity of the field itself. We discuss in this text the following points: (1) global theories, (2) accountability process, (3) performative practices, and (4) knowledge.

1. Global Theories

The literature about globalization has much to offer on theories and practices from different social, cultural and economic perspectives (Smith, 2013). Besides some authors well-known (Axford, 2013; Meyer, 1980), Ritzer (2007) offers a wider perspective on globalization, distinguishing three broad types of globalization theory – economic, political, and cultural. The political theories acknowledge the liberal theory, focusing on the importance of the free market, and the realist theory, "that sees globalization as the outcome of the power relations among nation-states" (Ritzer, 2007, p. 7). In the economic theories, Ritzer identifies the world-system theory, giving us a "very broad sense of the capitalist primarily divided between core nations that explore economically peripheral nations (with the "semiperiphery" somewhere in between)", and the Castell's notion of the network society, described as the informational capitalism, more horizontal and flexible in the way of the new world dominated by "spaces of places".

In theorizing the cultural aspects of globalization, Ritzer identifies the cultural differentials – "globalization only occurs on the surface, with the deep structure of cultures largely, if not totally, unaltered by it" (2007, p. 10) –, the cultural convergence – "There is the tendency to see global assimilation in the direction of dominant groups and societies in the world" (p. 11) – and the cultural hybridization – "hybrid cultures are nor reducible to either the local or the global culture" (p. 13).

This theoretical approach focused, focused on different dimensions of globalization, seen as one complex intertwined space, needs to be completed with the central notion of agency, if we accept postmodern' s challenge to the subject, not fixed and deconstructed by his individual experiences and interactions with others. Because never is it a linear process, the homogenization and standardization of the globalization will be better understood "on how and under what ideas travel, transfer, and take form as practices" (Pinar, 2013a, p. 13).

Globalization as a field of study began about five decades ago, signaled by the introduction of the world-system theory (Meyer, 1980). Naturally, such an approach would be the end of the local understood as an identity and singular space if the political process was a mere implementation. The study proposal by Steiner-Khamsi (2012, p. 7) "on policy borrowing and lending investigates how policies from one domain or one sub-system (education sector, health sector, economic sector, etc.) are transferred to another, or how they are transplanted from on system or country to another". The policy borrowing and lending "includes a notion of agency, is neutral with regard to the purpose and outcome of the policy-transfer, and accounts for a focus on the receivers, as well as the senders, in the policy-transfer process" (p. 8).

As interprets Waldow (2012), borrowing and lending have become the terms most commonly used for the study of contemporary education, being studied by the traveling policies: "one does not know where they come from, or go to; they are at the same time nobody's and everybody's reform" (Steiner-Khamsi, 2012, p. 11). The traveling ideas, as says Wahlström (2018, p. 655), "are not distributed as a package of ready-made transnational abstract ideas; instead, they are locally translated and selected by real people".

The interaction between transnational and the national is complicated and is not linear. So, there are different perspectives for analyzing curriculum policies, mainly the transnational organizations (World Bank, OECD, and EU) become global and strategic actors. "In this respect, many globalization processes take place deep within national institutions that are connected to trans-boundary networks and actors, thereby linking multiple national and local actors" (Wahlström, Alvunger & Wermke, 2018, p. 589). To understand this interaction, the authors identify three broad theoretical traditions in comparative education research traditions:

> borrowing and lending, the world culture approach, and the functional configurational model... the borrowing and lending approach directs its main interest in cross-national attraction and how external ideas are borrowed and recontextualized to suit national policy purposes. The world culture approach takes its starting point from a macro-level, focusing in convergences and adaptations of national policies to adjust to a global culture. Finally, the functional-cum-configurational model acknowledges that problems are problems because of their positions in certain interrelated systems and not because of the phenomenon itself. (pp. 590-591).

New discourses have been introduced through the global theories as new regulation on education, and more particularly on schools. Taubman's proposal about the teaching by numbers is a powerful analysis to understand the ongoing curriculum practice. This discourse occurs "under the twin banners of standards and accountability", emanating from both "within neoliberal economic policies", and "regulatory practices at the macro and micro levels" (Taubman, 2009, p. 3).

A model of governance by numbers is seen by Ball (2015a) as a technology of school exclusion, imposing narrowed possibilities for action due to the changing nature of the policy in the context of globalization:

> Policy gets done and re-done in many places and many ways by many different people. As it moves through these places, it changes and those subject to it are changed. We speak policy and at the same time policy speaks us, it creates positions from which we are to act a think. Accountability policies in particular produce new and sometimes distorted possibilities for action and identity and self-worth. (Ball, 2015b, p. 467).

Another discourse is the marketplace of education. As pointed out by Foucault (2010), the principle of competition is the focal structure of the market theory, which should be to govern for the market and not to govern because of the market. In this formulation, the state is seen under the surveillance of the market and not a market under the supervision of the state, ensuring individual interests as legitimate forms of governance. In the case of the governance of schools, it is evident that the marketization of curricular practices follows a vision centered on a number of perspectives, ignoring the true value of education, as claims Biesta (2013).

Consequently, the movement against educational reforms centered on schools, students, and teachers through global theories shifted the curriculum decisions. Under globalization, "the intended curriculum is apparently becoming more uniform around the world" (Anderson-Levitt, 2008, p. 349). The state is decreased in its decisions, confronted now with a shifting agenda operating to the production of pragmatical knowledge, is important to recognize "the usurpa tion of the role of the state in a broad range of economic and political affairs" (McCarthy, Bulut & Patel, 2013, p. 36).

The new policies oriented to the marketization of education are easily accepted by teachers, students, and parents, so "we all silently accept global capitalism is there to stay" (Gerrard, 2015, p. 855). Working within the logic of neoliberalism, the market on education and schools has changed not only what we are doing, but also what we are thinking, introducing a competitive attitude, as it was possible to compare schools by results and not consider the learning processes that are always unique and personal. The market-driven school means more privatization and an increased curriculum-testing approach.

According to Foucault (2010, p. 306), neoliberalism as social policy works on the basis of the recognition of differences, not having equality as a goal, especially when operating the formalization of society according to the company model, so that the return to the company is "an economization policy of all the social field".

Applying this idea to public education it means admitting that school markets impose educational policies that lead to intrinsic recognition of inequality inside the school. Similarly, an economic view invites us to accept this strange and unacceptable idea operating at the heart of the public school, expressed by Felouzis, Maroy, and Zanten (2013, p.11) as follows: "One could say somewhat that the school's natural state is to be unequal and unjust, and only public power can reduce, if not eliminate, this school's structural characteristic less and less acceptable at the collective level".

This analyze focused on global theories, more specifically on discourses around borrowing and lending, and school marketization as well as, introduces in the field of curriculum key terms that are central in the process of its decisions – standardization, and homogeneity – questioning Anderson-Levitt, (2008, p. 349): "Are curriculum and instruction in fact becoming more similar around the world?"

In a pertinent text, Slater (2015) argues that the uniformity has been enforced by neoliberalism in what he calls the theory of recovery, intrinsic to neoliberal education reform centered on politics of crisis. Because the neoliberal education project is multifaceted, complex, and adaptive, recovery is a mechanism to control schools, teachers, and students through advanced data systems, teacher effectiveness, standards and assessments, and high-performing schools. As he argues, "critical theory of recovery uncovers an important contradiction in neoliberal domination... An analysis of recovery can help critical education to understand the evolving utility of crisis for neoliberals" (p. 3).

A significate number of interwoven curriculum questions are now justified by economic logic. The school as a business (Pinar, 2007) requires the school's identity centered based on good practices, efficient management of resources, and effective learning achievement. The quality language is thus applied to schools to justify educational reforms, on the assumption that the school's status is always the result of its failure, as well as that of teachers, students, parents, and teacher training institutions (Taubman, 2009).

The numbers, both in terms of academic results, as statistical data, become powerful tools of political regulation, creating regulatory similarities among countries, sharing the same policy, and implementing mandatory strategies toward common decisions, namely by standardized external and internal evaluation. To Piattoeva, (2015, p. 316):

> In recent decades, countries around the world have increasingly turned to national standardized testing as a means to measure the learning achievements of their youth and to render them visible and compare the quality of learning and teaching across educational institutions and localities.

Indeed, the global agenda reflects a convergence of transnational policies, with a rhetorical enunciation from sharing policies linked to processes of accountability and local responsibility framed by theories of globalization understood as a powerful technology of governance, dictating the transnational importance both of economy knowledge-based and the human capital theory.

2. Accountability Process

In an age of accountability, what are the implications for schools and curriculum decisions?

For over the last decades, education has been a target of deep reform centered on insurance quality. The complicated notion of change is extending to all levels of political regulation, and the most directly focused governance areas are related to standards and assessments. This

significant change in the reform language contains one obvious conversion of the knowledge into the school subject perspective as employment needs, offering students pragmatic conditions to be successful. The idea of insurance quality is another production form of many similarities at global and national policies, understood as political rhetoric to promote local shifts in schools, namely on better results both of students' achievement, and external evaluation. Speaking about Australia's educational change, Hardy (2015a, p. 335) identifies the strong accountability pressure for increasing students' results "upon teachers and principals to engage in practices to ensure improved outcomes on standardized literacy and numeracy tests". Hence, the field of schooling practices has become increasingly dominated by the logic of enumeration (Hardy, 2015b).

If the insurance quality is the school's responsibility, there is a curricular shift associated with an emphasis on results in what is called the test-driven curriculum approach (Penner-Williams, 2010). In a Tylerian tradition, who gets to define the assessment also defines the knowledge to be transmitted in school, being the curriculum perspective as a plan or an Aoki's orchestral instrumentalism (Pinar, 2005, 2010), more specifically, as a central dispositif aligned by national and transnational tests, that PISA is an illustrative example. Besides the international ranking results about daily life competencies, the OECD's test a similar effect ground in the respect of curriculum similarities around the comparative world either about practical knowledge, preparing the students for the new knowledge economy, either concerning a transnational legitimation of one complex technology of assessment. The curriculum must be focused on tests and its governing is a particular way to justify some assessment techniques. In this analysis, the test assumes the full presence inside schools, implying a new context to organize the curriculum from a forceful perspective centered on test-driven accountability.

This new curriculum approaches bringing back in standards as criteria for learning assessment. As says Hartong (2015), standards have transformed education into a centrally measured, scalable output of performances, which can be described through a complex set of achievable competencies. Indeed, in the curricular organization, standards determine how teachers should implement a summative assessment tool and at the same time reveal one unquestionable faith in evaluation techniques to promote the school's quality.

In a variety of terms, the language of the standards includes competencies, emphasizing a curriculum practice centered on learning measurement from indicators and criteria substantially defined by the intended curriculum understood as a core curriculum. Rooted in these ideas, the administrative curriculum rituals are strongly based both on students' academic results, and teaching for tests, promoting the common language on curriculum construction from a recontextualized change imposed by national control instead of local autonomy. The school is defined now by a global policy establishing evaluation processes of convergence of knowledge to become more measurable in what counts as school knowledge. The language of common is an ongoing tragedy, as claimed by Grinnel and Rabin (2013, p. 748)

> We argue that the modern school's focus on the cognitive dimension of learning in combination with the extensive use of standardized tests as primary evidence of the quality of education exploits students as a particular kind of commodity: one that is held in common. This

> opens the door for a pernicious set of predictable outcomes, known collectively as "tragedies of the commons", first described by the ecologist Garrett Hardin in 1968.

Also, Labaree (2012) analyzes the school within the creation of the common school movement. First, the common organizational, then the common curriculum, based on standards and performance, and ongoing time with digital technologies or by agency student, the common pedagogical. This language is what "allows schools to change continuously and remain very much the same" (p. 155), maintaining the school syndrome: the magical belief that schooling can somehow improve society, promote access, and preserve advantage, as the author calls his article. If the problem persists, is the school syndrome curable?

In Labaree's (2012, p. 162) words, "we cannot find a simple cure for this syndrome because we will not accept any remedy that would mean giving up one of our aims for education in favor of another. We want it both ways". More: we do not want the remedy of curricular market theory, based on competition, standards, and on students losing and winning.

Such similarity or commodification of curriculum in its all decision components incorporates the neoliberal ideology, i.e., schools improve through a competition based on the accountability process linked to insurance quality, external tests, and standards.

All these aspects have a strong influence on the definition of a conceptual and methodological framework on the external evaluation of schools (OECD, 2013; European Commission/EACEA/Eurydice, 2015). Indeed, the institutional evaluation of schools is a complex process and its effects need to be investigated on the organizational, curricular and pedagogical dimensions, in recognizing that accountability as a purpose of evaluation and assessment is gaining in importance:

> Countries are increasingly using evaluation and assessment for accountability purposes. This can take a variety of forms. First, there is a growing trend of public reporting, including the publication of standardized student assessment results at the school level for use by parents, government officials, the media and other stakeholders, the publication of school inspection reports, school annual reports, and system-level reports providing an assessment of the state of education. Second, evaluation and assessment results are increasingly used to reward or sanction the performance of individual school agents. This goes alongside the expansion of school external evaluation and teacher appraisal procedures. Several countries have instituted systems whereby either schools, school leaders or teachers receive rewards for their good performance or are the subject of sanctions for underperformance. (OECD, 2013, p. 7).

3. Performativity Practices

Education and schools have been analyzed from a performative view because is considered the competition as a keyword to strengthen both quality and efficiency/efficacy. Moving beyond its basic principles, Lundgren (2015) assures there is in the social accountability process a significant shift from an emphasis on goals to an emphasis on results. Inside schools, such a shift operates a meaningful change in teachers' work and students' learning achievement.

Considering that in regimes of performativity, the experience is nothing, and productivity is everything, Ball (2012, p. 29) writes about the performative culture:

> A key facet of the above is what I have called previously (Ball 2001, 2003) – with a little help from Lyotard and Foucault – performativity, a powerful and insidious policy technology that is now at work at all levels and in all kinds of education and public service, a technology that links effort, values, purposes and self-understanding to measures and comparisons of output.

School performativity is always situated in a controlled context in which teachers and students are continuously held accountable for results, being schools more instructional by tests that perform than the education that provides for all students in terms of social justice and inclusion. Thus, the performative culture, understood in a logic of enumeration from national policy, as for Australian educational system acknowledges Hardy (2015a, p. 335), provokes a "significant pressure upon teachers and principals to engage in practices to ensure improved outcomes on standardized literacy and numeracy tests, and of teachers and principal's responses to these policy pressures".

To performativity practices through standardized testing in own room of schools, the effects of national policy support have a high tendency for educational aspects to be devalued or even mitigated. Similarly, more standardized and accountability-oriented approaches to assessment only are school evidence of the performativity, writes Ball (2015a, p. 299):

> As neoliberal subjects, we are constantly incited to invest in ourselves, work on ourselves and improve ourselves – drive up our numbers, our performance, our outputs – both in our personal lives and our work lives. In teaching, the articulation of performance and improvement in terms of student's test scores is more and more widely linked to another set of numbers – money – in the form of reward – that is performance-related-pay.

Performativity practices also strengthen school improvement in a conformity way by the external evaluation, in general, led by Inspectorate, namely for European countries (Eurydice, 2015). The quest for quality assurance in the context of performativity practices has conducted educational policy to an evidence-based governance regime built on two dominant arrangements which often exist side by side: performance standards and school inspections (Ehren, Altrichter, & McNamara, 2013). In many studies, Inspectorate has been related to school improvement and accountability systems. In a systematic review of empirical studies and theoretical texts, Klerks (2013, p. 3) argues that the effects of school inspection are measured on school improvement, of teachers' behavioral change, and students' achievement results, because they "are used as an instrument to monitored and improve the educational quality of schools".

In spite of transactional convergence, the school evaluation reflects specificities in terms of national policies due not only by assessment practices used in each country but also from the different ways of applying standards on the recognition that the hybridization process always occurs inside adjustments to Europeanization and globalization processes. Analyzing the school evaluation in Norway and Sweden, Brooks and Sivesind (2015, p. 443) conclude: "We find that school inspection in both countries implies bureaucratic–legal modes as well as evaluative

modes of governing", emphasizing the strong influence of the Inspectorate to school evaluation because by global circulating discourses of good governance centered on accountability and performativity schools are assessed on the basis of regulatory practices. Just as Wilkins (2014, p. 196) writes, "how good governance (an appeal to professional standards, performance evaluation, and technical expertise) operates as a new modality for state power and intervention". Nowadays, good governance in the neoliberal agenda is always more accountability, performativity, and responsibility to actors and organizations. In this context, "curriculum policy makes a significant contribution to the technical accountability culture through complicity in performativity, high-stakes, testing, and data-driven decision making, at the same time as constituting student and teacher subjectivities (Winter, 2015, p. 55).

4. Knowledge

Lyotard's working hypothesis "is that the status of knowledge is altered as societies enter what is known as the postindustrial age and cultures enter what is known as the postmodern age" (Lyotard, 1984, p. 3), creating "the prospect for a vast market for competence in operational skills" (p. 51). If procedural knowledge is different from scientific knowledge, the postmodern age is related to the end of the metanarratives, even of the critical narratives, giving rise to informational knowledge. Therefore, this kind of knowledge goes is increasingly coming together with hand the procedural knowledge, perspective by its pragmatic nature, widely legitimized by globalization.

In the context of what he calls the nationalization of education, based on test and market-driven education, Young (2008, p. 3) develops a common framework to bringing the knowledge back in, reacting to the "later poststructuralist variants influenced by writers such as Foucault and Lyotard were both forms of 'voice discourse' which reduce knowledge to knowers, their standpoints and interests". His reaction also goes to technical-instrumentalists, for whom the curriculum imperative is not education but preparing for the competitive knowledge-based economy. Young's arguments, namely in 2008, 2013, 2014, and 2015 texts, are drawn on four principal ideas. Firstly, the ongoing attack on knowledge is because there is no clear answer to what is the important knowledge students should be able to acquire at school.

Secondly, the relativists such as the postmodern theorists have made the critique of the western tradition of knowledge into an intellectual project. Thirdly, what counts as valid knowledge implies rules agreed about a social commitment in defining the entitlement to powerful knowledge for all pupils. The notion of powerful knowledge as a curriculum principle is proposed by the author as subject knowledge structured by core disciplines, e.g., the power and concepts of the social realist knowledge-driven school. The last, the curriculum must not start from the student but a student's entitlement or access to knowledge.

The entitlement to (powerful) knowledge is an idea of social justice because he accepts the idea of a common curriculum or core knowledge for all pupils up to the age of 16. The everyday knowledge or experience is a question that students bring to school and the way the teacher embodies the context is important to understand the difference between curriculum and

pedagogy. By this idea, Young underlines the curriculum as a distinguished process of pedagogy, believing in the supremacy of the social over the personal, more specifically the supremacy of the powerful knowledge to say what the students may learn.

As a starting point of his theoretical proposal, Young (2013, p. 101) believes in a conceptual crisis of curriculum studies, working from the canonic and Spencer's question of the field What knowledge is of most worth?

> Let me summarize my argument so far. It is that in moving from a technicity model of instruction, associated with earlier strands of curriculum theory, to an ideology critique, curriculum theory lost (or is fast losing) its primary object what is taught and learned in school. Arguably, as a result, it loses its distinctive role in educational studies. This 'loss of object' – the specificity of schools – has had two consequences. First, it has opened the door in curriculum theory to a whole range of writers in philosophy, literature, and cultural studies who raise serious questions about culture and identity in modern society but have little specific to say about the school curriculum. The second consequence is that governments and curriculum designers - at least in the United Kingdom, pay less and less attention to curriculum theorists as specialists in the curriculum field. (Young, 2013, p. 105)

Indeed, Young establishes a curricular discourse to take off the curriculum studies field from an epistemological crisis created by relativists, by the postmodernists/poststructuralists, and the constructivist approach. When he writes "curriculum theory needs a theory of knowledge" (p. 107), it would be more appropriate to say a theory of powerful knowledge. However, a school driven by powerful knowledge is a powerful school centered on the structures of common and basic disciplines far from students' daily experience.

For Pinar (2009a), with his idea based on social realism back into a sociological discussion about school knowledge, Young draws a boundary line to delimit what must be considered objective knowledge. Being at odds with this conceptual perspective, Pinar offers a distinct analysis concerning the key curricular question – what knowledge is of most worth? "It is posed by individuals existing at specific historical moments, in particular places, confronted by, infused with, the reality that is itself ever-shifting, in part according to our engagement with it" (Pinar, 2009a, p. VIII).

In his critical analysis of Young's concepts presents on social realist knowledge, for Pinar (2009b, p. 194) "when 'the social' predominates, agency fades, the victim of the epiphenomenal status 'the social' assigns to the individual", underlying the subjectivity as curriculum principle in what he calls the cosmopolitan curriculum:

> The worldliness of a cosmopolitan curriculum implies that general education is more than an introduction to "great works", the memorization of "essential knowledge or a sampling of the primary disciplinary categories... it is subjectively structured academic study of this lived-historical problem of "my life and flesh", perhaps through great works, perhaps through sampling major intellectual traditions, no doubt involving memorization, organized around teachers' and students' questions expressed in creative curricular forms. Such a cosmopolitan curriculum may

> claim disciplinary and/or interdisciplinary identification; its educational significance is demonstrated by providing intellectual and lived bridges between self and society. (Pinar, 2009b, p. 9).

Celebrated by thinkers in the educational field, but not in Curriculum Studies (see among others, Morgan, 2014; Wheelahan, 2015; Baker, 2015), Young examines the breakdown of the sociology of education (and sociology of curriculum) addressed by ideology, phenomenology, and poststructuralists, claiming for the end of the epistemological crisis on curriculum theory. Lundgren (2015, pp. 787-788) maintains that Young "does not convince me that there is a crisis" because "what is described as a crisis is based on the normative idea that curriculum theory must begin from the learner's entitlement to knowledge".

When we declare a crisis, we admit both a problem and a solution. In the canonic question of the curriculum studies– What knowledge is of most worth? – the problem is that there is not a solution, either epistemological or socially. The students' entitlement or access to knowledge will always be a controversial issue, mainly from the post-critical theories, pointing out Pinar (2009b, p. 196): "Is the knowledge that needs to be brought back in self-knowledge?".

To OECD (2018, p. 2), the aim of the Future of Education and Skills 2030 project is "to help countries find answers to two far-reaching questions: What knowledge, skills, attitudes, and values will today's students need to thrive and shape their world? How can instructional systems develop this knowledge, skills, attitude, and values effectively?".

The state of the curriculum studies field comprises a wide vision of what is happening in the field and the emphasis on theoretical analyses and its diversity cannot be considered an epistemological crisis (Pacheco, 2012). The knowledge is simultaneously an epistemologically, socially and methodologically issue bringing not a crisis requiring a unique solution but a problem to be discussed from the intertwined social and individual spheres.

Analyzing the globalized society and the neoliberal solutions to increase education markets, Lundgren (2015, p. 797) asserts that the basis of the ongoing theoretical question is the reduction of the knowledge to competencies or learning results:

> In curricula and public discussions about the curriculum, there is now a shift in how content is described. The term knowledge is at least partly replaced by terms like competence and ability. This is motivated as a consequence of new demands for competence and capacity. The curriculum language around the selection and organization of content is changing.

If the education is now governed by changing economic conditions, "this is not a crisis for curriculum theory" (Lundgren, 2015, p. 788), only new perspectives to be critically analyzed in the way how the curriculum is worldly being a mandatory dispositive, offering a solid solution to "educate" the student for the knowledge-based economy.

It is well known how transnational agencies play a speech-and-practice act to influence global theories and worldly policy. The language of numbers creates discourses (of quality, efficiency, and efficacy) embedded in curriculum practices. For example, as observes D'Agnese (2015, p. 56):

> The OECD identifies education with learning, learning with assessment, and assessment with PISA's test... PISA manifests a clear ideology and situates education in a well-defined value square: money, success, evidence, and competition. This situation raises substantial doubts concerning a tool that claims to be 'a mirror' of Education.

Similarly, in his critical texts about practical knowledge of PISA's testing of reading, mathematical and scientific literacy, Popkewitz (2011, p. 36) relies on the OECD' assertion that "PISA measures the practical ability to apply skills in everyday life situations linked to economy and labor and not, in effect, about learning science and mathematics".

From this new speech-and-practice act appear in the curriculum old concepts, such as pragmatic or procedural knowledge, oriented to the work context, considered as powerful practical knowledge. Like the postmodern and poststructuralists authors, who say that knowledge is always situated at the heart of the subjectivities and identities individually recreated, pragmatic knowledge could signify both practical knowledge, justified by universal norms, and epistemic knowledge, centered on disciplines:

> The concept of competency implies more than just the acquisition of knowledge and skills; it involves the mobilization of knowledge, skills, attitudes, and values to meet complex demands. Future-ready students will need both broad and specialized knowledge. Disciplinary knowledge will continue to be important, as the raw material from which new knowledge is developed, together with the capacity to think across the boundaries of disciplines and "connect the dots". Epistemic knowledge, or knowledge about the disciplines, such as knowing how to think like a mathematician, historian or scientist, will also be significant, enabling students to extend their disciplinary knowledge. Procedural knowledge is acquired by understanding how something is done or made – the series of steps or actions taken to accomplish a goal. Some procedural knowledge is domain-specific, some is transferable across domains. It typically develops through practical problem-solving, such as through design thinking and systems thinking. (OECD, 2018, p. 6).

Therefore, a pragmatic or procedural knowledge is not restless in terms of subjectivity of the learner, but a knowledge that imposes itself as the dominant point of view, in organizational terms, prevailing one perspective that standardizes the singular and distinctive views, or according to Pinar (2015) the knowledge, history and alterity interrelation of the human subject.

It is here that Young (2015, p. 821) does not want to discuss conceptually with authors who emphasize the subjectivity, reinforcing the notion of powerful knowledge to establish a curriculum conversation: "When I first came across term curriculum theory as a complicated conversation in a paper by William Pinar, I thought that the idea might play down the importance of finding better theories. Reading these papers convince me that I was wrong".

Being wrong in conceptual terms, because he proposes the theory of knowledge as a curricular principle to start this conversation, how can he aspire that the powerful knowledge could be the end of the epistemological crisis in curriculum studies?

The identity crisis of curriculum studies is not a simple matter of knowledge or its forms of selection, organization, and transmission, as discussed by several authors from the sociology of education, particularly Bernstein (1999). The bringing back into Schwab's curriculum commonplaces it is a possible discussion, not into the structure of disciplines, but the teacher's experience: Another required body of experience is knowledge of the teachers. This should include know ledge of what these teachers are likely to know and how flexible and ready they are likely to be to learn new materials and new ways of teaching (Schwab, 1973, p. 504).

The unique nature of learning, de-standardized and de-rationalized, it is a historically and individually project reinvented by each scholarship generation. For Macdonald (1985a, p. 17) the process of human development is a process of becoming:

> The individual life cycle is a process of becoming characterized by the individuality and uniqueness of the human being: not each becoming a man in a generic sense, but each becoming a human individual with myriad potentialities not known or predictable in any absolute sense".

This human process is particularly constructed as a subjective curriculum conversation. In curriculum theory,

> curriculum conceived as conversation invites students to encounter themselves and the world they inhabit and that inhabits them through academic study, through academic knowledge, popular culture, everyday experience: all threaded through their own lived experience. Forefronting test scores on standardized tests cut this thread. (Pinar, 2015, p. 30).

The human project on curriculum is defaced by the ideology of achievement, to use Macdonald's words? Who proclaims the powerful knowledge as curriculum principle certainly believes in a transmissible teacher, knowing and acting under to transform the school into the best place to memorize. Possibly, Young with a powerful concept about knowledge to define the disciplinary school is "neglecting the-how-teachers-work selecting and organizing the content to be taught" (Lundgren, 2015, p. 792). This content is a subjective answer in the ongoing present, defined by a historical moment, as says Pinar (2015, p. 27):

> Instead of objectives to be assessed, we study the historical moment, including how the present becomes embodied in our individual subjectivities, and how we might study both through academic knowledge in conversation with those around us. I realize that such language derives from culturally specific traditions and addresses nationally specific situations, but that acknowledgment is part of the rationale for curriculum development, design, and research situated in and addressed to the particular, in part through studying larger circles of influence, including intellectual histories and present circumstances.

Would an unfinished solution to the alleged identity crisis of curriculum studies be only a matter of knowledge? More than a theoretical crisis about the losing object of curriculum studies – "what is taught and learned in school" (Young, 2013, p. 105) – is an issue of curricular language about "the loss of personal living in schooling" (Macdonald, 1995b, p. 117), recognized by Pinar (2013b, p. 528):

> Only in the ethical exercise of professional judgment can teachers contemplate the compelling curriculum question – what knowledge is of most worth – and communicate their academically informed subjectively animated answer to the children in their care. Curriculum research enables understanding of what is at stake in the complicated conversation such as contemplation and communication stimulate.

The curriculum is a preparation for life and under the accountability policies and performativity practices is more a preparation for procedural knowledge, measured by international large-scale assessment.

Conclusions

Globalization is creating modes of governance (politics) and governmentality (actors), imposing accountability processes and performativity practices on education and curriculum. The global policies are moving the curriculum construction from the national to the transnational level. It would illusory to admit that the changes only occur at the level of the intended curriculum or level of knowledge. The political governance intersects directly as teachers, students and parents look to the classroom, increasingly seen as a political arena of quantitative results, limited to testing, the academic performance production techniques, e.g., instruction replacing the objectives for competencies.

The classroom becomes a technical space and assessment machinery and not a space for education. It is a piece of machinery driven by market logic, based on the idea that the schools produce winners and losers, such as the broad society. At the level of governmentality decisions, the curriculum within schools is mostly influenced by one fear of culture, in the following words of Foucault (2010) when describing neoliberalism. In effect, from the language of accountability, "there is the fear of chaos erupting or deadly silence" (Taubman, 2009, p. 129) defacing the language of education (Biesta, 2013). Given this reality we may turn to another school, as argues Hardy (2015a, p. 359): "Ensuring that such logic does not dominate schooling practices seems fundamental if we are to foster schools as sites of education, rather than simply for standardized testing".

If the crisis of curriculum studies finishes with bringing knowledge back in, based on the social realist approach, the field will never have a sufficiently valid solution, even "the struggle over schooling has always has been a struggle for knowledge" (Young, 2013, p. 115). And in the discussion of its object, we do not need to talk about solutions, because the divergence and plurality support the own dynamic discussion of its intrinsical inquietude. Perhaps, we need to talk more about teachers. For Pinar (2015, p. XI),

> like a compelling conversation, the curriculum can have a life of its own. In my conception, the teacher becomes even more indispensable when freed from objectives and outcomes. The key interlocutor, the educator is engaged in an ongoing study, in solitude, with others.

The language of the epistemological crisis is the inner language of the curriculum field. We need to look for the curriculum studies as a specific field and not admit its transition to other

fields, as says Ian Westbury, interviewed by M. Emir Ruzgar (2018, p. 13): "There is not less work for the field, albeit differently framed, but I see the field's on-going work being transferred again to subjects, to policy analysis, to psychology and even to teacher education because we are still in full flight from the field".

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References

Anderson-Levitt, K. M. (2008). Globalization and curriculum. In F. M. Connelly (Ed.), *The Sage handbook of curriculum and instruction* (pp. 349-368). Sage Publications.

Axford, B. (2013). *Theories of globalization*. Polity Press.

Baker, D- P. (2015). A note on knowledge in the schooled society: towards an end to the crisis in curriculum theory. *Journal of Curriculum Studies, 47*(6), 763-772.

Ball, S. (2012) The making of a neoliberal academic. *Research in Secondary Education, 2*(1), 29-31.

Ball, S. J. (2015a). Education, governance and the tyranny of numbers. *Journal of Education Policy, 30*(3), 299-301.

Ball, S. J. (2015b). Editorial. Policy actors/policy subjects. *Journal of Education Policy, 30*(4), 467.

Biesta, G. (2013). *Para além da aprendizagem*. Autêntica.

Books, J. & **Sivesind**, K. (2015). State school inspection policy in Norway and Sweden (2002-2012): a reconfiguration of governing modes? *Journal of Education Policy, 30*(3), 429-458.

D'Agnese, V. (2015). PISA's colonialism: success, money, and the eclipse of Education. *Power and Education, 7*(1), 56-72.

Ehren, M. C. & **Visscher**, A. J. (2006). Towards a theory on the impact of school's inspection. *British Journal of Educational Studies, 54*(1), 51-72.

Ehren, M. C., **Altrichter**, H. & **McNamara**, G. (2013). Impact of school inspections and improvement of schools – describing assumptions on causal mechanisms in six European countries. *Educational Assessment, Evaluation Accountability*, 25, 3-43.

Eurydice (2015). *Assuring quality in education: policies and approaches to school evaluation in Europe*. Eurydice Report. Publications Office of the European Union.

Felouzis, G., **Van Zanten**, À. & **Maroy**, C. (2013). Les Marchés Scolaires. Sociologie d'une politique publique d'éducation. PUF.

Foucault, M. (2010). *Nascimento da Biopolítica*. Edições 70.

Gerrard, J. (2015). Public education in neoliberal times: memory and desire. *Journal of Education Policy, 30*(6), 855-868.

Grinell, S. & **Colette**, R. (2013). Modern education: a tragedy of the commons. *Journal of Curriculum Studies, 45*(6), 748-767.

Hardy, I. (2015a). A logic of enumeration: the nature and effect of natural literacy and numeracy testing in Australia. *Journal of Education Policy, 30*(3), 335-362.

Hardy, I. (2015b). Data, numbers and accountability: the complexity, nature and effects of data use in schools. *British Journal of Educational Studies, 63*(4), 467-486.

Hartong, S. (2015). New structures of power and regulation within "distributed" education policy – the example of the US Common Core State Standards Initiative. *Journal of Education Policy, 31*(2), 213-225.

Klerks, M. C. (2012). *The effect of school inspections: a systematic review*. http://schoolinspections.eu/wp-content/uploads/downloads/2013/12/ORD-paper-2012-Review-Effect-School-Inspections-MKLERKS.pdf

Labaree, D. F. (2012). School syndrome: understanding the USA's magical belief that schooling can somehow improve society, promote access, and preserve advantage. *Journal of Curriculum Studies, 44*(2), 143-163.

Lundgren, U. P. (2015). What's in a name? That which we call a crisis? A commentary on Michael Young's article "Overcoming the crisis in curriculum theory"? *Journal of Curriculum Studies, 47*(6), 787-801.

Lyotard, J. (1984). *The postmodern condition: a report on knowledge*. Manchester University Press.

Macdonald, J. B. (1985a). An image of man: the learner himself. In J. B. Macdonald (Ed.), *Theory as a prayerful act* (pp. 15-35). Peter Lang.

Macdonald, J. B. (1985b). The quality of everyday life in schools. In J. B. Macdonald (Ed.), *Theory as a prayerful act* (pp. 111-126). Peter Lang.

Meyer, J. W. (1980). The world polity and the authority oF the nation-state. In A. Bergesen (Ed.), *Studies of modern world system* (pp. 109-137). Academic Press.

Morgan, J. (2014). Michael Young and the politics of the school curriculum. *British Journal of Educational Studies*.

OECD (2013). *School evaluation: from compliance to quality. Synergies for better learning: an international perspective on evaluation and assessment*. Paris: OECD.

OECD (2018a). *The future of education and skills, Education, 2030*. OECD.

OECD (2018b). *Curriculum flexibility and autonomy in Portugal – an OECD review*. OECD.

Penner-Williams, J. (2010). Tested curriculum, In C. Kridel (Ed.), *Encyclopedia of curriculum studies* (pp. 878-879). Sage.

Piattoeva, N. (2015). Elastic numbers: national examinations data as technology of government. *Journal of Education Policy, 30*(3), 316-334.

Pinar, W. F. (2005). "A lingering Note": An Introduction to the Collected Works of the Ted T. Aoki. In W. F. Pinar, & R. L. Irvin (Eds.), *Curriculum in a New Key. The Collected Works of Ted. A. Aoki* (pp. 1-85). Lawrence Erlbaum Associates, Publishers.

Pinar, W. F. (2007). *O que é a teoria do currículo?* Porto Editora.

Pinar, W. F. (2009a). *The worldliness of a cosmopolitan education: passionate lives in public service*. Routledge.

Pinar, W. F. (2009b). The Unaddressed 'I' of Ideology Critique. *Power and Education, 1*(2), 189-200.

Pinar, W. F. (2010). The primacy of the particular. In E. Malewski (Ed.), *Curriculum studies handbook: The next moment* (pp. 143-152). Routledge.

Pinar, W. F. (2013a). Introduction. In W.F. Pinar (Ed.), *International handbook of curriculum research* (pp. 1-144). Routledge.

Pinar, W. F. (2013b). Curriculum research in the United States. Crisis, reconceptualization, and internationalization. In W. F. Pinar (Ed.), *International handbook of curriculum research* (pp.521-532). Routledge.

Pinar, W. F. (2015). *Educational experience as lived: knowledge, history, alterity*. Taylor & Francis.

Popkewitz, T. S. (2011). Pisa: Numbers, standardizing conduct, and the alchemy of school subjects. In M. A. Pereyra, H.-H. Kottoff, & R. Cowen (Eds.), *PISA under examination: Changing knowledge, changing tests, and changing schools* (pp. 31–46). Sense Publishers.

Ritzer, G. (2007). *The globalization of nothing 2*. Pine Forge Press.

Ruzgar, M. E. (2018). On matters that matter in the curriculum studies: an interview with Ian Westbury. *Journal of Curriculum Studies, 50*(6), 670-684.

Sandlin, J. A. & **Letts**, W- (2014). Editors' introduction: what an eight-foot-omg mega coon taught us about attending to uncomfortable. *Journal of Curriculum and Pedagogy, 11*(1), 1-4.

Schwab, J. J. (1973). The practical 3. Translation into curriculum. *School Review, 81*(4), 501-522.

Slater, G. B. (2015). Education as recover: neoliberalism, school reform, and the politics of crisis. *Journal of Education Policy, 30*(1), 1-20.

Smith, D. G. (2013). Wisdom responses to globalization. In W. F. Pinar (Ed.), *International handbook of curriculum research* (2nd Ed., pp. 45-59). Routledge.

Spencer, H. (1859). *What knowledge is most worth?* Westminster Review.

Steiner-Khamsi, G. (2012). Understanding policy borrowing and lending. Building comparative policy studies. In G. Steiner-Khamsi & F. Waldow (Eds.), *World yearbook of education 2012. Policy borrowing and lending in education* (pp. 3-17). Routledge.

Taubman, P. M. (2009). *Teaching by numbers. Deconstructing the discourse of standards and accountability in education*. Routledge.

Wahlström, N. (2018). When transnational curriculum policy reaches classrooms – teaching as directed exploration. *Journal of Curriculum Studies, 50*(5), 654-668.

Wahlström, N., **Alvunger**, D. & **Wermke**, W. (2018). Living in an era of comparisons: comparative research on policy, curriculum and teaching. *Journal of Curriculum Studies, 50*(5), 587-594.

Waldow, F. (2012). Standardisation and legitimacy. Two central concepts in research on educational borrowing and lending. In G. Steiner-Khamsi & F. Waldow (Eds.), W*orld yearbook of education 2012. Policy borrowing and lending in education* (pp. 411-428). Routledge.

Wheelahan, L. (2015). Not just skills: what a focus on knowledge means for vocational education. *Journal of Curriculum Studies, 47*(6), 750-762.

Wilkins, A. (2014). Professionalizing school governance: the disciplinary effects of school autonomy and inspection on the changing role of schools governors. *Journal of Education Policy, 30*(2), 182-200.

Winter, C. (2017). Curriculum policy reform in an era of technical accountability: 'fixing' curriculum, teachers and students in English schools. *Journal of Curriculum Studies, 49*(1), 55-74.

Young, M. (2008). *Bringing knowledge back in: from social constructivism to social realism in the sociology of education*. Routledge.

Young, M. (2013). Overcoming the crisis in curriculum theory: a knowledge-based approach. *Journal of Curriculum Studies, 45*(2), 101-18.

Young, M. (2014). *The curriculum and the entitlement to knowledge*. Retrieved from http://www.cambridgeassessment.org.uk/Images/166279-the-curriculum-and-the-entitlement-to-knowledge-prof-michael-young.pdf

Young, M. (2015). Curriculum theory and the question of knowledge: a response to the six papers. *Journal of Curriculum Studies*, 47(6), 820-837.

2.

Curriculum Policies

The social construction of the curriculum: the case of Portugal and Spain (1970-2005)

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ABSTRACT
This paper compares the key landmarks of the curriculum reforms in Portugal and Spain, from 1970 to 2005, the core period of political (and educational) democratization and European integration in both countries, from a socio-historical perspective. Despite the many similarities between both education systems, there were considerable differences on the way the different educational stages were re-configured during this stage, as well as how curriculum autonomy was conceived and implemented. The relation of such reforms with differences in the education patterns (early leaving, qualifications, learning outcomes) of recent generations is also explored. This analysis enables us to question the perspective of the neoliberal hegemony over the curriculum, and to suggest a more complex view of curriculum change as the result of the actions of (and alliances between) different educational-political movements.

KEYWORDS
Curriculum reforms, education systems, structuration, equity, quality.

1. Introduction

The school curriculum is a fascinating and key topic for understanding educational systems and their relation with broader social structures, both in terms of how the curriculum is framed by social forces and in terms of the effects it has on the re-structuration of society, considering the education of each generation as a process with (very often, unpredictable) effects on the cultural landscapes, social relations, economic trends.

Taking the opportunity for a revision of my Ph.D. research (Abrantes, 2008a), my contribution to this wide discussion is based on an analysis of the basic and secondary curriculum developments, in Portugal and Spain, during the historical period from 1970 to 2005. The focus is on how both curriculum frameworks evolved, in both countries and throughout these decades, especially regarding the differences between primary and secondary education.

Many studies have acknowledged a cleavage in curriculum between primary education (highly integrated, constructivist, and child-centered) and secondary education (fragmented in many subjects and knowledge-centered), generating transition problems for many students (Delamont, 1987; Fernández Enguita, 2007; Galton et al., 2003; Gimeno Sacristán, 1996; Hargreaves, 1990; Nisbet & Entwistle, 1969; San Antonio, 2004). This gap is apparent in educational systems with unequal degrees of curriculum autonomy and many of the previous authors explain it through a cultural differentiation process within educational systems. Still, in the case of decentralized systems, the debate is more focused on (primary and secondary) schools' structures and strategies, while in the most centralized ones it is mainly conceived as an issue of national policies.

Historically, such differentiation is explained by specific social and political functions: primary education for all, and secondary education (often segmented into branches) to select and prepare the dominant and privileged classes. However, the massification of secondary education put such differentiation under pressure, and therefore the reform of secondary education became a major topic of discussion in many countries. Very different national models still coexisted, even when European convergence was apparent in many other areas (Prats & Raventós 2005). In Portugal and Spain, such massification process was particularly fast and took place basically from 1970 on, linked with a political move towards democratization and European Union (EU) membership. Thus, it is interesting to analyse how such curriculum models were challenged and changed during this period.

Moreover, if the structuration of the Portuguese and Spanish educational systems has many similarities, as well as the recent political and economic changes, it is interesting to explore how a different model came up – in Portugal, a 9-year basic education and 3-year multi-branched secondary education, in line with the Nordic tradition; in Spain, a 6-year primary education, a 4-year compulsory secondary and then a 2-year multi-branched upper secondary, as in other European countries but this is the case from 1990 (when LOGSE was passed). Previously (1970 LGE), the Spanish system was made up of eight years of primary education and four of secondary education.

In this paper, we discuss the social causes and consequences of such developments in both countries. Specific attention is paid to how such different models paved the stage for a stronger school autonomy policy in Portugal, during the last decades, in comparison with a curriculum autonomy associated with regional divisions in Spain.

2. Theoretical framework: the social construction of the curriculum

Our theoretical framework is based on two main research lines. On the one hand, Ivor Goodson's studies (1993, 1997) on the social construction of the curriculum, in different countries, from the 19th century on, were a key contribution to understanding how the curriculum is a product of the conflicts and alliances between social forces in some specific historical moments, and how some of these agreements become institutionalized for a long time afterward. This is especially the case with the establishment of school subjects, since the curriculum turned to be a major field for power relations and tensions between subjects (the new ones claiming space;

the existing ones struggling for survival), often preventing (or at least conditioning) the vision of the curriculum as a whole, as well as global discussions regarding coherence (between education stages) and the degrees of school autonomy.

On the other hand, this debate was framed by a wider research line on the structuration and modernization of education systems, often through comparative models, considering reference works such as Archer (1979), Petitat (1982), Popkewitz (1991), and Fernández Enguita (2007). Although such works are not only focused on the curriculum, they enable us to understand how curriculum frames and changes are deeply connected not only with other dimensions of the educational systems (such as infra-structure, teachers' training, students' demand, etc.), but also with wider social structures and cultural-intellectual movements. Such studies stress how modern educational systems are multi-regulated and subject to contradictory influences. Particularly, they provide explanations on how a comprehensive, inclusive, and democratic concept of schooling has penetrated the traditional, conservative and selective model of education (especially in the case of secondary education), but facing inertia and resistance forces, generating complex, conflicting, and often contradictory systems. Those studies also explain how both movements were recently challenged by the increasing power of a neoliberal agenda in education.

Rooted on these perspectives, my theoretical framework was increasingly focused on how, during the last decades, national school curricula were re-shaped (or at least challenged) by three contrasting international movements, including a permanent tension and many conflicting episodes: entrepreneurial-neoliberal, communitarian-democratic, and academic-conservative. The variable strength of each of these movements (and their ability to forge alliances) were key elements to understanding the reforms, in each country and historical time.

The entrepreneurial-neoliberal movement promotes both the expansion of private schooling and the introduction of company-based organizational models in public-school management (as well as combinations of both, such as public-private partnerships, outsourcings, etc.) (Gewirtz et al., 1995; Goodson, 2010; Lima & Afonso, 2002). Such solutions are supported by a powerful ideological landscape in the media. According to this perspective, the state should regulate (and fund) rather than provide, schools autonomy shall be fostered, as well as families' "free choice", under the assumption that the best curriculum solutions thrive from the market rules. For instance, more comprehensive and more selective models may coexist and compete, both in primary and secondary education, and families choose which model they prefer.

In opposition, the communitarian-democratic movement sustains that curriculum (and the whole school system) shall be ruled by principles of inclusiveness, participation, and emancipation. In this case, school autonomy is claimed, including autonomy over the curriculum, to empower school agents (teachers, students, families), by making them the main actors and decision-makers (Duru-Bellat & Van Zanten, 1999; Fernandéz Enguita, 1993; Payet, 1997). These models were followed in more radical forms in some private schools, but they also influenced the education reforms at large, in many countries, during the last decades. In both cases, they were easier to introduce in primary education, due to their historical ground (see above), and faced stronger resistance in secondary education.

Finally, the academic-conservative movement relies on a nostalgic discourse regarding an alleged decay of current curriculum standards that, in spite of the lack of scientific evidence, has high visibility in the media (Almeida & Vieira, 2006; Baudelot & Establet, 1990; Feito, 2002). It attacks directly pedagogy, school autonomy, and its engagement with local communities and calls for a "back-to-basics" curriculum, centrally designed, content-based, and evaluated by external exams (Apple, 1989; Feito, 2002; Popkewitz, 1991; Tyler, 1988). This conservative approach has also the support of many nostalgic teachers, especially from secondary education, regarding their more powerful status in the past.

Some authors argue that the entrepreneurial-neoliberal movement was globally hegemonic during the last decades, even recognizing multi-level refraction processes and multiple "contextualized ethics" (Ball & Van Zanten, 1998; Goodson, 2010; Popkewitz, 1991). Still, one shall acknowledge the existence of these three movements and their influence on curriculum policies, higher or lower in different places and times (including their power to block or mitigate reforms claimed by the neoliberal movement). For instance, one possible "agreement" was to take a more democratic-communitarian approach to primary education and a more academic -conservative and/or entrepreneurial-neoliberal one in secondary education, increasing the pressure over transitions. Accordingly, curriculum autonomy tends to be higher in primary than in secondary education.

Still, divergences between countries are striking and alliances are critical. In some cases, the academic and the entrepreneurial movements came together and took a powerful position on curriculum reforms, but tensions between them are also apparent, since the first claims for high curriculum standards and selective/repressive procedures, while the second advocates for appealing and customized solutions to fit any "client" and to expand the market. Another interesting coalition is the one forged between communitarian and neoliberal, enabling to foster curriculum autonomy, although with contrasting purposes.

3. Methodological Design

The present chapter is therefore an update of one of the main dimensions of my Ph.D. research, carried out at ISCTE – Instituto Universitário de Lisboa, between 2004 and 2008 (Abrantes, 2008a).

This "multi-located" research included:

> A document analysis of the curriculum development and educational outcomes, both in Portugal and in Spain, especially from 1970 to 2005, in comparison with studies on other national systems;
>
> Fieldwork in 10 schools (5 in Madrid and 5 in Portugal, 3 public and 2 private schools in each country), including semi-directive interviews with the principal, teachers, and pupils, as well a survey to pupils in the 7th grade (3rd cycle of basic education, in Portugal; 1st year of compulsory secondary education, in Spain).

There was scarce prior research on this topic in Portugal and Spain. Besides, both countries provide interesting comparative cases, since their societies and educational systems are characterized by many common historical features, the democratization/massification of secondary education was achieved only in the last decades of the 20th century, when both joined the European Union, but their curriculum development differed significantly during this period, especially regarding the definition of education stages and, therefore, their curriculum aims, organization, and outcomes, as well as the concept of curriculum autonomy. How to understand such developments and their impacts?

4. Key developments in Portugal and Spain (1970-2005)

Until the end of the 1960s, the educational systems in Portugal and Spain were highly centralized, nationalist, and conservative, based on a clear distinction between a primary education, which disseminated prescriptive basic content and traditional values among all children, and a secondary education, which promoted a deeper knowledge, organized around in different subjects in a limited number of high schools ("liceus") to students selected and evaluated through national exams. Grade retention and early school leaving at the end of primary education (and throughout secondary education) were very high, and there were vocational schools to train young people for technical occupations. Therefore, secondary education was highly selective and oriented by/toward higher education (Barroso, 1995; Escolano, 2003).

These structures, strongly inspired by the French centralized, hierarchical, and academic model (Archer, 1979; Bourdieu & Passeron, 1970; Petitat, 1982; Vincent et al., 1994), were supported by both dictatorships as an efficient tool of social control. Teachers' education and status were very asymmetric – low education and status of the primary school teachers; high education and status of secondary school teachers –, although in both cases strongly constrained by standards and inspectorates (Nóvoa, 1994; Viñao Frago, 2007). Still, two significant differences were apparent: in Spain, primary education consisted of six years of schooling, in Portugal only of four; in Spain, its expansion was based on a mixed private-public model, including many catholic schools, while in Portugal the large majority of schools were publicly owned and managed, although catholic principles were also included in the curriculum.

While in most European countries, during the first half of the 20th century, primary education was extended and/or a comprehensive (low) secondary stage was created, in a context of industrialization and democratization processes (Archer, 1979; Muller & Karle, 1993; Petitat, 1982), in the Iberian countries, such pressures were delayed until the end of the 1960s. In 1967, a "preparatory stage" (of both secondary education and vocational programmes) was introduced for 5th and 6th grades, as a transitional step to the creation of "middle-schools". And, in 1970, Spain launched an education reform, which included an 8-year basic education, for children from 6 to 14 years of age. In order to understand this "cultural turn" of the Spanish system (Escolano, 2003), we should take into account a higher industrial demand and a stronger structure of previous primary education. In Portugal, such ambition was expressed in some government documents but was considerably constrained by the lack of financial resources and political stability, especially due to the colonial wars in which Portugal was involved, from 1961 to 1974 (Teodoro, 2001).

The 1974 revolution in Portugal generated a sudden transformation of the political landscape. The new 1976 Constitution introduced principles and goals that are more progressive for the education system, settling the duty of the state to hold a network of public schools to ensure the right of all children to attend and to have success in education, as well as pointing out the principles of decentralisation and democratic management of schools. Such principles were expressed in the 1986 Education Law, which institutionalizes a new organization of the educational system, with a 9-year (compulsory) basic education for all, followed by three additional (voluntary) years of secondary education (organized in different scientific-humanistic or vocational branches). With regard to the curriculum, catholic and traditional values were removed, but a conservative (and academic) pace of change prevailed (Grácio, 1985). There was a first curriculum reform during the 1990s, towards a higher comprehensiveness, but the fragmented and academic structures were kept in place in the 2nd and 3rd cycles of basic education. And only in 2001 an integrated curriculum for basic education was published, including a principle of flexible curriculum management, while former subject standards remained.

Spain has experienced a more gradual "transition process" towards democracy, and in 1990 a new Education Law was approved, which settled principles of regional (autonomic communities) curriculum autonomy, as well as democratic management of schools. Such change entailed an extension of compulsory education (8 to 10 years), organized in two different stages, a 6-year primary education and a 4-year compulsory secondary education, followed by 2-year voluntary academic and vocational programmes. Although it is based on a more progressive framework, this new law was also influenced by a conservative concern about the quality of education in the intermediary schooling years, which is influenced by the "back-to-basics" ideology. Accordingly, a subject-based and increasingly standardised structure was reintroduced from the 7th grade onwards (Feito, 2002; Prats & Raventós, 2005). Such concern was also visible in Portugal, since 2002, when a new right-wing government restored more selective and centralized mechanisms, especially in the 3rd cycle of basic education as well as secondary education, and a new proposal that intended to unify these two stages was only blocked by the left-wing President in charge.

It is important to stress that, in both countries, the democratization process entailed: (1) a strong initial support to a democratic-communitarian movement; (2) a high recognition of the rights of teachers (unions) and universities, including the need to deal with academic-conservative pressures from these sectors; and (3) an increasing integration in a global economy, where neoliberal trends were flourishing in the education sector, as well as in other sectors. Therefore, a "multi-regulation" model was consolidated, with multiple movements and permanent social and political struggles over education policies and priorities (Archer, 1979). Besides, in Spain, the increasing force of the regional political movements led to a vision of curriculum autonomy that was strongly linked to such territorial structures, while curriculum flexibility in Portugal was mostly associated with teachers' and schools' degree of autonomy to adapt the national curriculum to their students and local realities.

Teachers' professional training and status is also an important factor. While higher education training for primary education teachers expanded – one that focused on child-oriented pedagogies and called for an improvement of social and economic conditions –, secondary education teachers remained educated in specific subject university programmes, while their "distinctive"

status – at least in the cultural field – was threatened by the massification of secondary and higher education, as well as by the qualification of primary education teachers, leading to a nostalgic resistance to comprehensive education models (Feito, 2002; Fernandez Enguita, 2001). Instead of selecting and teaching a dominant class, they are now expected to educate every child. In Portugal, such tension was also apparent, but many teachers were simultaneously working in the 3rd cycle of basic education and in secondary education, so a cultural conflict between the two professional groups was avoided.

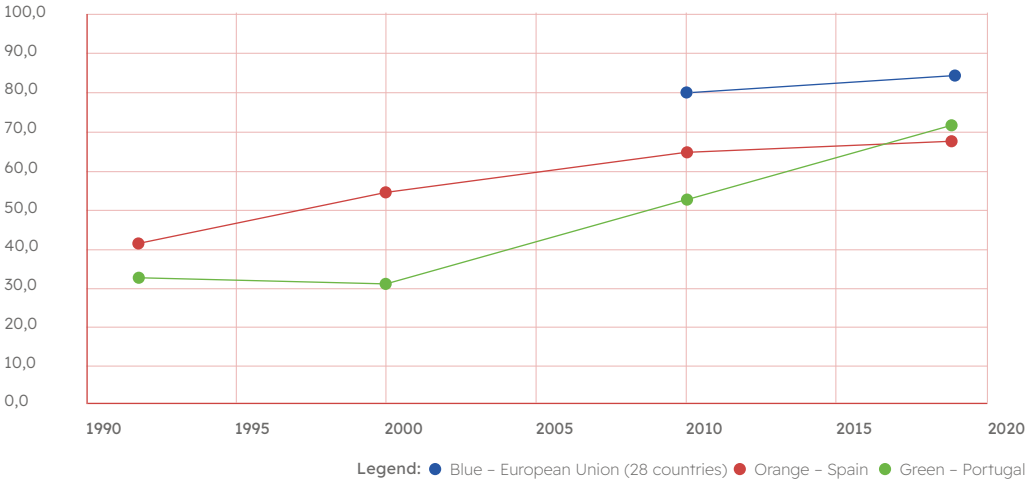
5. Some impacts on schooling pathways and equity

Curriculum reforms are usually extended processes, and their impacts on schooling pathways and equity patterns are only apparent in the long run. So, it is now a relevant moment to discuss some impacts of the education reforms carried out from 1970 to 2005, in both countries, briefly sketched in the previous chapter.

Based on Eurostat comparative data, one may see a different schooling path progression in Portugal and Spain. Regarding the generation born in the 1950s, which made most of their school path during the 1960s, only 25% in Spain and 21% in Portugal completed upper secondary education (and around 13% got a higher education degree, in both countries).

Spain had a much faster increase in schooling pathways, during the 1970s and the 1980s, when a comprehensive model of 8-year basic education was put in place, in comparison with a more conservative model in Portugal (see previous section). The generation born in the 1970s took most of their schooling in the 1980s and were young at the turn of the century: 56% of the Spanish completed upper secondary, but only 32% of the Portuguese did so (see graph 1). And the contrasting impact on the rate of higher education certification was even more impressive: 34% in Spain vs. 13% in Portugal (see graph 3).

Graph 1. Percentage of youth (age 25-34) with an upper secondary degree.

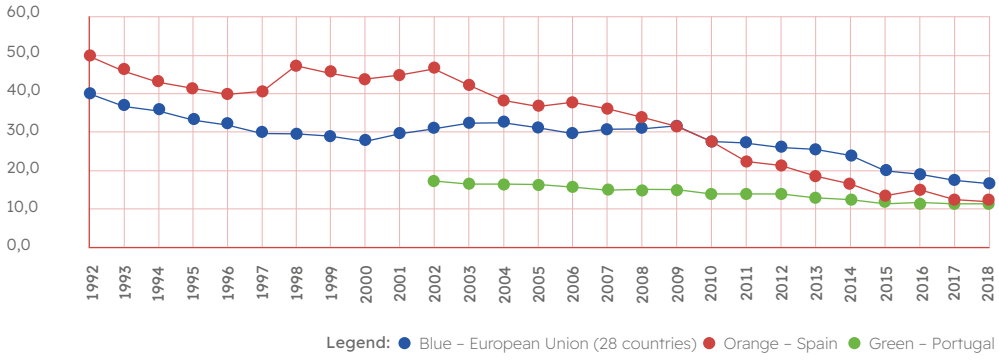


Source: Eurostat database.

But one shall also consider that fast success comes with a price. In this case, it was a stronger academic-conservative pressure to restore the former curriculum model of a 6-year primary education and the beginning of secondary education at age 12. Meanwhile, in Portugal, the deceiving outcomes in contrast with the European standards were an important push for the approval of a more communitarian-democratic model of a 9-year basic education with high school autonomy over the curriculum management, even if its three cycles kept very distinct organizational models and cultures (Abrantes, 2005a).

Concerning the generations born in the 1990s, who already made their schooling paths in the reformed national curriculum frameworks, one may address quite the opposite trend of the former decades. So, the pace of progress in upper secondary completion rates was slow in Spain (56% to 68%), and very fast in Portugal (32% to 72%). Such data are in line with the evolution of the early leaving from education and training (ELET) rates, the main indicator used by the European Union to assess the performance of educational systems. In Spain, the ELET decrease was impressive during the 1990s, but deceiving during the last decade; in Portugal, it was quite the opposite (see graph 2).

Graph 2. Early Leaving from Education & Training (1992-2018).



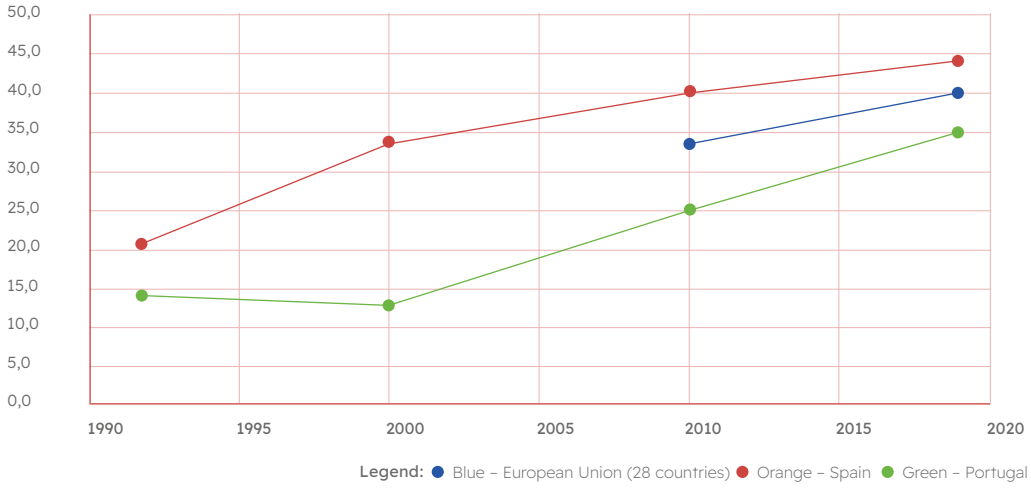
Source: Eurostat database.

The fieldwork in Portuguese and Spanish schools focused on the 7th grade, has reinforced such argument, since a higher tension in Spain was evident apparent, especially in vulnerable and immigrant contexts, between teachers' expectations and students' background, leading to high failure rates (Abrantes, 2008a, 2008b). Many teachers and students argued that a significant curriculum gap between primary and secondary education standards was a central reason for such tension and for a common decline in students' grades. In Portugal, such phenomenon was also visible, but a smoother transition was apparent, considering a previous change from 1st to 2nd cycle (in 5th grade) and a delayed move to secondary education (in 10th grade), in many cases remaining in the same school.

Interestingly, patterns in higher education completion rates were slightly distinct, since the fast development in Spain, during the 1980s and 1990s, was maintained in the following decades, although at a slower pace, while Portugal only achieved a significant increase since the beginning of the 21st century. Probably, the new Spanish educational model was more successful in

preparing students for higher education than in providing conditions for all to succeed during primary and secondary education, while changes introduced in Portugal were able to generate improvements in both goals simultaneously.

Graph 3. Percentage of youth (age 25-34) with a higher education degree.



Source: Eurostat database.

In both countries, during the last few decades, the development of such indicators was often depreciated in public opinion, according to an argument that they were a direct effect of curriculum standards deflation, in order to create an illusion of equal opportunities for all and to meet European requirements. The concept of quality is a more complex and subjective one, so comparisons between generations and between countries are difficult.

Still, since 2000, the PISA programme provides an assessment of 15-year-old students' competencies, that it is widely accepted as the most powerful comparative "proxy" of education quality between countries (OECD, 2016). The analysis is obviously complex, but the significant progress in Portugal from 2000 onwards (in reading, math, and natural science, at least), comparing with the weak evolution in Spain, suggests that the more conservative-academic system introduced in Spain did not boost quality, while a more communitarian-democratic system introduced in Portugal did not lead to a progressive (and often announced) lack of quality. In other words, the fast progress of education levels during the last two decades in the latter was actually hand-in-hand with an effective increase in young people's competencies and higher education opportunities.

6. Concluding remarks

This chapter provides a theoretical and empirical analysis of some curriculum reforms in Portugal and Spain, from 1970 to 2005, stressing differences in the main framework embraced as well as exploring some impacts on schooling pathways. Both societies share many historical features, went through deep political, cultural, and economic transformations during those

35 years, associated with powerful global trends, and with impact of curriculum debates and reforms. Still, the different models developed allow us to understand that globalization is much more complex than a single process towards a homogeneous model.

It is important to bear in mind that school curriculum analysis is a very wide and multidimensional field of studies, and in this case, we only focused on two main curriculum frames: the organization of different educational stages and the degree of (regional and school) autonomy. The comparative and longitudinal analysis of teachers' training, school organization, subjects, standards, guidelines, and assessment mechanisms were equally very useful to deepen this analysis.

It is also undeniable that schooling pathways are influenced by school curriculum, but also by many other factors, including social policies, labour market rules and demands, school supporting/compensatory programmes, extra-curriculum activities, family structures, youth cultures, the media, and so on and so forth.

This acknowledgment may pave the stage for future and wider explorations on this topic. Still, one shall consider that scientific research has always to select some variables, in order to analyse their patterns in a systematic manner. Besides, as we try to highlight throughout this paper, the (re)definition of educational stages and the conception/degree of curriculum autonomy are two key elements to frame curriculum development, and therefore a core issue of education policy debates, in the context of power relations between multiple groups and classes in modern societies.

References

Abrantes, P. (2008a). *Os Muros da Escola: As Distância as Transições entre Ciclos de Ensino.* PhD Thesis. ISCTE-IUL.

Abrantes, P. (2008b). On the strange habit of reading adversity instead of diversity: Madrid's middle-schools and their Latin-American students. In M. Pereyra (Ed.), *Changing Knowledge and Education* (pp. 275-290). Peter Lang.

Almeida, A. N. & **Vieira**, M. M. (2006). *A Escola em Portugal*. Instituto de Ciências Sociais.

Apple, M. (1989). *Educação e Poder*. Artes Médicas.

Archer, M. (1979). *Social Origins of Educational Systems.* Sage.

Ball, S. & **Van Zanten**, A. (1998). Logiques de marché et éthiques contextualisées dans les systèmes scolaires français et britannique. *Éducation et Sociétés, 1*, 47-71.

Barroso, J. (1995). *Liceus: Organização Pedagógica e Administração (1836-1960).* Gulbenkian/JNICT.

Baudelot, C. & **Establet**, R. (1990). *El Nivel Educativo Sube*. Morata.

Delamont, S. (1987). *Interacção na Sala de Aula*. Livros Horizonte.

Escolano, A. (2003). Modernización pedagógica y escuela para todos en la educación secundaria española: el giro cultural en el modo de educación de masas. In R. Fernandes, & J. Pintassilgo (eds.), *A Modernização Pedagógica e a Escola para Todos na Europa do Sul no Século XX* (pp. 101-113). SPICAE.

Feito, R. (2002). *Una Educación de Calidad para Todos.* Siglo XXI.

Fernández Enguita, M. (1993). *La Profesión Docente y la Comunidad Escolar: Crónica de un Desencuentro*. Morata.

Fernández Enguita, M. (2007). *Educação e Transformação Social.* Pedago.

Galton, M., **Gray**, J. & **Rudduck**, J. (2003). *Transfer and Transitions in the Middle Years of Schooling (7-14): Continuities and Discontinuities in Learning.* Research Report RR443. DfEE Publications.

Gewirtz, S., **Ball**, S. & **Bowe**, R. (1995). *Markets, Choice and Equity in Education.* Open University Press.

Gimeno Sacristán, J. (1996). *La Transición a la Educación Secundaria.* Ediciones Morata.

Goodson, I. F. (1993). *School Subject and Curriculum Change.* The Falmer Press.

Goodson, I. F. (1997). *A Construção Social do Currículo*. Educa.

Goodson, I. F. (2010). Times of educational change: towards an understanding of patterns of historical and cultural refraction. *Journal of Education Policy, 25*(6), 767-775.

Grácio, R. (1985). Evolução política e sistema de ensino em Portugal: dos anos 60 aos anos 80. In E. Loureiro (Ed.), *O Futuro da Educação nas Novas Condições Sociais, Económicas e Tecnológicas* (pp. 53-154). Universidade de Aveiro.

Hargreaves, D. (1990). *The Change for Comprehensive School: Culture, Curriculum and Community*. Routledge.

Lima, L. & **Afonso**, A. J. (2002). *Reformas da Educação Pública: Democratização, Modernização, Neoliberalismo.* Edições Afrontamento.

Muller, W. & **Karle**, W. (1993). Social selection in educational systems in Europe. *European Sociological Review, 9*(1), 1-23.

Nichols, G. & **Gardner**, J. (1999). *Pupils in Transition: Moving between Key Stages*. Routledge.

Nisbet, J. & **Entwistle**, N. (1969). *The Transition to Secondary School*. University Press.

Nóvoa, A. (1994). A educação portuguesa: 1945-1992. In C. Lozano (Ed.), *Educación Ibero-Americana: 500 Años.* Garcia Valadés.

OECD (2016). *PISA 2015 Results: Excellence and Equity in Education*. OECD.

Payet, J. -P. (1997). *Colléges de Banlieue: Ethnographie d'un Monde Scolaire*. Armand Colin.

Petitat, A. (1982). *Production de l'École, Production de la Societé*. Droz.

Popkewitz, T. (1991). *Sociología Política de las Reformas Educativas: El Poder/Saber en la Enseñanza, la Formación del Profesorado y la Investigación*. Morata.

Prats, J. & **Raventós**, F. (Eds.) (2005). *Los Sistemas Educativos Europeos: ¿Crisis o Transformación?* Fundación "La Caixa".

San Antonio, D. M. (2004). A*dolescent Lives in Transition: How Social Class Influences the Adjustment to Middle School*. State University of New York Press.

Teodoro, A. (2001). *A Construção Política da Educação: Estado, Mudança Social e Políticas Educativas no Portugal Contemporâneo*. Edições Afrontamento.

Tyler, W. (1988). *School Organization: A Sociological Perspective*. Croom Helm.

Vincent, G., **Lahire**, B. & **Thin**, D. (1994). Sur l'histoire et la théorie de la forme scolaire. In G. Vincent (Ed.), *L'Éducation Prisonnière de la Forme Scolaire?* (pp. 11-48). PUL.

Viñao Frago, A. (2007). *Sistemas Educativos, Culturas Escolares e Reformas.* Pedago.

Curriculum and teacher education in secondary school policies in Brazil

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ABSTRACT
This chapter focus curriculum policies regarding secondary school from which students follow to higher education or professional activities. Only a few students are able to continue studying, as most need to enter the labor market. However, policies related to secondary school education have focused, primarily, on the small group that goes to higher education. The challenge of combining the two fundamental orientations, preparation for the academic environment and professional life, has long been identified by scholars and policymakers. Different solutions have been tested more or less successfully over the years. Trends and tensions have, at various times, determined changes in the different modalities tested, which focus on the curriculum, course structure, and preparation of the teachers. Integrated secondary school is being experimented for a number of years (since 2004) in a considerable number of schools across the country. The chapter presents part of the evolution of secondary school to frame a discussion about the experience of the new integrated modality.

KEYWORDS
Curriculum, teacher education, integrated secondary school, educational policies, Brazil.

Introduction

The combination of two very complex notions, such as curriculum autonomy and its policies indicates the wide scope of the book's title, which also extends over trends, tensions, and transformations implicit in the combination. The concept of curriculum occupies a prominent place in the field of education and its autonomy is a challenge for scholars who are committed to its conceptualization. As for the policies, they concern the setting of priorities, paths, limits for those who enter the field and will bring the proposed policies to life. This entails teachers, administrators, students, staff, counselors, psychologists, technicians, in short, all the staff who gravitate towards the educational axis. Children and young people experience those policies, receiving the whole set of trends and tensions involved in them as well as their transformations along the

way, quite far from their starting point, as highlighted by Ball (2004; Avelar, 2016), internationally, and Mainardes (2006; Mainardes & Marcondes, 2009), in the Brazilian context.

The importance of curriculum within education has long been recognized by those involved in this field: at the school level, by teachers and administrators, in academia through research, and in the policy arena. In its beginning, in a very distant early stage, curriculum might have been understood as a program, a list of contents to be taught in specific subjects or disciplines. This idea has been expanded to correspond to the vast reality covered by the curriculum in the effective work of an educational institution. This expansion benefited from the contribution of many scholars on the subject, by unveiling, with their research, aspects that escape observation and even daily work in schools, but that greatly influence it. This is the case, for example, with the notion of "hidden curriculum", brought by the studies of Basil Bernstein. Once this idea is understood, by the staff involved in the educational work of a school, all the work is done from another perspective, much broader and more valuable.

Among the many significant ideas of Bernstein's work (Santos, 2003), the different language codes also stand out. The notion that different socioeconomic levels have different access to culture, with great repercussions on the school's work and the development of language mastery is a strong one. There are many contributions of the author to clarify the concept of curriculum and its importance in the field of education, as pointed out by one of his former disciples, Michael Young (2011), who also brings his contribution, especially highlighting the place of powerful knowledge in the curriculum and in the very development of education to which everyone is entitled.

Curriculum studies nowadays also include the voice of practitioners. A text written by a researcher with a long experience as a school principal, for example, entitled "Taking curriculum seriously" (Counsell, 2018), presents how the author sees the relationship between the curriculum and the students, in the intermediation of the teacher's work. She highlights how a teacher interests students in a theme but also how the knowledge presented is the one available and, therefore, it's important to leave space for other interested parties to enter the search, including the students themselves.

1. Evolution of Secondary Education in Brazil

The topic of this chapter draws on several questions and discussions that are relevant to curriculum studies. Secondary school is the segment of the Brazilian educational system located at the end of basic education, before higher education. Before secondary school, there is the initial part, nowadays called elementary school, subdivided between elementary I and II. The evolution of secondary school, throughout the country's History, reflects different demands of society at different times. Nowadays, it faces the challenge of offering young people, when completing basic education, preparation for higher education or for a paying job. The multiple policies that have been devised emanate from dominant trends and tensions in various eras. Those policies and influences have resulted in transformations that include strong repercussions on the curriculum and special demands on the education and work of the teachers.

Occupying a strategic position for the socio-economic development of the country, secondary education has been studied by researchers who seek to clarify long-standing problems, including its own identity, that is, what objectives it is actually addressing (Frigotto & Ciavatta, 2011). It is also very much targeted by policies and legislation, which seek to meet popular demands with political proposals about it. As an example, we recall the decision of the state government of São Paulo, in the 1960s, to have a secondary school in each city of that state. This was intended to meet the insistent demand of the mayors because secondary schools were seen as the possibility of social ascension for young people. Satisfying this demand, however, required a crucial decision in the state budget allocation, sacrificing the portion earmarked for teachers' salaries. Thus the process of lowering the salary of teachers began, moving away from the standard that they previously had in comparison with other professions. This is information from Melchior (1980), one of the few researchers dedicated to studies on the financial aspects of the teaching profession in Brazil.

A portrait of the evolution of secondary school shows some of the inflections on its identity. From the 1930s onwards, although not compulsory, schools in the official state network, as well as those in the private network, offered primary school, which was compulsory, and secondary education. This equaled Brazil to other countries, such as France, which had a strong influence on the Brazilian educational system. Secondary education had, at that time, great prestige, as a fundamental component of the formation of the youth of the elites, also being known as a junior secondary school, immortalized in the literature by the well-known work of Raul Pompéia "The Athenaeum" (2000).

Although not easily accessible, secondary school was, from the 1940s and 1950s onwards, much sought after by middle-class families, socially positioned below the elite and representing a modest percentage of the population. For their children, secondary education, though with only a fairly general preparation in the disciplines considered basic ensured penetration into slightly higher social strata and perhaps even the possibility of a job, such as a simple bureaucratic function in a bank, or in a firm. Its diploma was considered very important and deserved a solemn ceremony.

Besides junior secondary school, there were other modalities like those with commercial, industrial and agricultural activities. A very small number of schools offered the introduction to practices or techniques related to these domains, aiming at directing their graduates to specific jobs. Students who benefited from this education were admitted to industries or firms on slightly more favorable terms than others who were supposed to start from scratch, learning everything on the job. In the mid-1940s, the activities of the "System S" institutions, an important government-backed initiative, started. They provided training for young people interested in obtaining employment in the fields of industry, commerce, and agriculture. This training responded to at least part of the country's needs in its development, more or less successfully. It was, thus, a secondary school aligned with this development, although reaching a very modest number of beneficiaries.

For girls, the preparation for teaching in primary school was already being consolidated at this level of education, through the Normal School. This was the main access to professional work for women, even though the classification as a professional deserves a specific discussion (Lüdke

& Boing, 2004). The Normal Schools also established themselves as a successful example of the articulation between theoretical and practical training in the preparation of future teachers for primary education at that time, thanks to a good combination of factors well analyzed by various scholars, such as Schaffel (1999). Aparecida Joly Gouveia, in her well-known work, Teachers of Tomorrow (1970), makes clear the introductory character to the teaching work done by this secondary school modality of great importance in our educational history.

In the 1950s, a major structural change extended the duration of basic education, adding a period of three years that would take the place of secondary school as described so far. This new period was divided into two courses, the scientific, in the areas of Engineering and Exact Sciences, and the classical, closer to the field of Humanities. These studies became compulsory for university candidates, who would enter if they passed the entrance examination, which since then has represented the great tormentor of young elite students. Often, entrance exams meant a year or more of preparing in the famous "cram school". Students, with very high costs, sought to overcome the shortcomings left by secondary school, because the competition was very high, for the reduced number of places in the few institutions of higher education.

The identity of this new secondary school was clearly defined by its orientation toward the university. The entrance examination, as the term implies, allowed entry to those deemed fit to follow the requirements of a tertiary level course and then to pursue a professional career closely linked to it. This led to a situation where the focus of the work of teachers and students, of the curriculum, was at the service of those who already had the social and cultural capital necessary to advance to a higher degree (Bourdieu & Passeron, 1964). The concluding period of education understood as basic for all young people was a hostage of the preparation for the next step: higher education.

The new secondary school, coming after preschool education, the old primary and the old secondary school had the primary function of preparing students for higher education. Over time, this period of schooling failed the expectations of students who wanted an opportunity of formal education but not to pursue higher education as it focused on preparation for that level of study.

At the end of the 20th century, another discussion was brought upon the secondary school, as the long-debated question of the role of the secondary school in the development of young people gained strength. The debate focused on the balance between the preparation for citizenship and the preparation for the job market. This placed this intermediate phase of unclear identity between the general formation, indispensable for every citizen, and the preparation for a job. As the idea of a secondary school that sought to integrate the two basic functions began to be tested in some schools, its challenges were unveiled and its problems debated intensely by scholars. Old impasses surfaced between what was understood as general secondary school education and what was characterized as technical secondary school, a branch of professional education. Heated debates, combining political and pedagogical arguments, not always with a necessary balance, crossed the late 20th century into the 21st century, accompanying government initiatives, not always welcomed by teachers and researchers committed to finding solutions to address well-known problems. Key topics were raised, such as structuring a new secondary school course integrated with a new curriculum convincingly encompassing the culture of

both educational perspectives. The discussions also included the need for teachers prepared to work in an integrated way and school leadership and guidance teams, essential for tackling the challenge.

At the beginning of the 2010s, research on secondary school (Cabral Neto & Castro, 2011; Ferreti, 2011; Kuenzer, 2011; Machado, 2011; Ramos, 2011) offers a picture of many of the problems that are still faced but also offering some solutions that could gradually help to combine the two types of curriculum.

2. In search of new settings for Secondary School

From the research, a number of difficulties were revealed, among which: the lack of teachers qualified to work with the specific training of students from various fields; structural inadequacy of schools for professional training courses; the understanding of the industry that the role of the school would not be to generate business training. It also highlighted how the general formation, left in the background missed the formation of the citizen in its entirety.

Focusing on more structural aspects, the modality of technical courses integrated in secondary school (from 2004 onwards) brought a number of issues into focus, such as the composition of subjects for the new school curriculum and its transformation into timetables, the boundaries established around knowledge circulating in the new set of subjects, the creation of syllabuses, and the openness to suggested content by teachers. In a scenario that foresees new actors and the alignment of two curricula of a different nature, that of a technical course and a regular secondary school course, these aspects end up challenging the establishment of the new Integrated Secondary School modality.

The need to clarify between Integrated and Integral became relevant. Integrated, the kind of secondary school that Brazil is dealing with, has a sense of integration, a key concept that guides the very conception presented here, a possible term to approach a junction or union. On the other hand, Integral, as it is used in studies in Education in Brazil has to do with at least two other ideas: a) wholeness, as in “integral formation”, promoted, as we understand it, by the Integrated secondary school and b) the expansion of the student's length of stay in school, a context in which one would be talking about full-time education that is not a sine qua non condition for the realization of the modality in question.

Integrated Secondary School carries the hope of a more current and consistent way of completing the path of student education in Brazilian Basic Education, particularly if the answer to “what is the purpose” of secondary school is close to the idea of general education.

The concept of secondary school has gone through a very winding path in the history of the country, having different objectives along the way, revealing a somewhat fragile conceptual identity. Today, it can be said that it has taken on the role of preparing elites for the university path, as well as preparing for the job market. Nosella (2015) explains how “The strategic function of secondary school is also justified by the strategic function of the middle sector of the

nation's social structure. There is a close political-cultural relationship between the average schooling and the social elevation of this sector". As with many educational questions, discussions about secondary education connect to social oppositions identified throughout history. Here we find the tension between specific training for a job, answering market demands, and general education, closer to intellectual work and an academic path. It is the Integrated secondary school that emerges as a potential strategy to smooth out such a split. Students graduating from this modality would ideally be trained to act as professional technicians and would be able to face entrance exams at universities.

Some questions remain, however, regarding the lack of consistency in the objectives of regular secondary school, general education. One focus on whether secondary school aims to deepen and expand the knowledge acquired by students over the previous years in elementary school or should it focus primarily on preparing students for a college career. This duality puts the sector in the middle of a path, where the previous journey must be completed but also where it is necessary to prepare for the next stage. A second question relates to the non-professionalization of students who do not go to university and are unable to perform a qualified job for society.

Moura, Lima Filho and Silva (2015) understand that curriculum integration in secondary school is possible and desirable since it creates a unitary basis for all students, based on an integral human formation, as assumed by the proposal of 2004, having science, technology, and culture as an axis. On the one hand, the technical aspect is fundamental, being necessary to prepare for a job, an aim of many students; on the other hand, the isolated humanistic formation does not enable students' full development, particularly since its "abstract character" is not immediately relevant for performing in the job market. The articulation of technical with general formation is close to the meaning of "polytechnics", as proposed by Saviani (2003), which we understand in the sense of uniting technical and intellectual work, not in the sense of learning a variety of techniques. The polytechnic aspect that we highlight is very close to that of the already mentioned integral (whole) education. This enables the student socially, for the development of their autonomy, through reflection, knowledge of a broad and general culture, but also of their qualification for working.

In the traditional curricular perspective, the contents would be taught by a juxtaposition of subjects of a technical course and those that make up a regular secondary school course, combining this with other technical arrangements, such as the extension of schedules and organization of a course grid of subjects. However, experienced scholars (Frigotto, Ciavatta & Ramos, 2012) highlight, since the first experiences with the integrated modality, that this is not the case. The modus operandi of an integrated course, which combines knowledge and professionals from the technical area with those of the Basic Education area, involves and demands much more than that, touching the sphere of the curriculum, in its sense of trajectory to be traversed, reflected, understood and modified.

The integration between curricula is what constitutes the greatest strength and the greatest challenge to Integrated Secondary School. Promoting the integration of knowledge areas that circulate in this pedagogical context requires a great effort, as the movement to integrate is not

common in school systems. And this is a new modality that is being acknowledged and known while it is being constructed and implemented. Unboxing the compartmentalized knowledge of the disciplines, and in a dialogic, pertinent, and systematic way, searching for consistent ways to promote the integration of curricula and the knowledge they contain becomes indispensable for the essential articulation in the promotion of autonomy (Freire, 1996) and the polytechnic formation (Saviani, 2003) of the students. The challenge also involves smoothing out the borders that tend to be well-demarcated between the typical curricula of one area and another. This is needed because, for Integrated Secondary School, curricular objects are not seen in parallel, but in a unified, unitary way – since it brings together what is diversified, not because it equals or reduces it. The duality between the areas in a curriculum analysis of Integrated Secondary School courses is not appropriate. A technical course integrated within Basic Education is only justified if it is understood as a course that promotes the omnilateral formation of its students, enabling a multiple, integral, polytechnic course.

It is worth mentioning that Integrated Secondary School – general education associated with vocational education – is one of the ways of organizing education at this level. Still, the regular format, of general education, is much more common. Private schools generally take the regular mode, looking to guarantee success for their students on university selection tests.

The implementation of the Integrated Secondary School is done through its professionals: teachers. Particularly, the teachers of these technical courses integrated into the secondary school, who are professionals from technical areas, who are not typical of the school context. A technical course integrated into secondary school, in the current Brazilian reality, consists of licensed teachers, responsible for the subjects common to regular secondary school courses, and by professionals from various technical areas, coming from their specific areas (in nursing, tourism, informatics, engineering...), who act as teachers and, on an equal basis with licensed teachers, decide, judge, evaluate and organize the curriculum. It's the case that in Integrated Secondary Education, part of Basic Education in Brazil, professionals who have no pedagogical training are working as teachers. The specificity of the teaching work is put to the test.

Since the Integrated Secondary School aligns the technical courses and the general formation, we underline the issue regarding the training of professionals who work there: licensed teachers in the most diverse subjects, who have undergone teacher education; and teachers who are, considering their initial education, professionals from other areas. Since 2017, however, with the enactment of Law 13415, which regulates new guidelines for secondary school, it becomes official the performance of professionals from different areas in this sector, provided they have "recognized knowledge" in the field in which they will act. Although they are not licensed for teaching in Basic Education, they are officially acknowledged as teachers. Following Roldão (2007), we understand that teaching supposes that someone is taught something and that someone takes what has been taught for themselves. Thus, any act of teaching is by nature a pedagogical act – and this entails a specific type of knowledge, the one involved in teaching. From this perspective, pedagogical acts bring challenges and possibilities to actors who are involved in the process of teaching. In this sense, thinking about Integrated Secondary School means addressing the specific knowledge of teaching and how the professionals teaching there relate to it.

A second analysis of this situation is based on the notion of powerful knowledge (Young, 2011; Young & Lambert, 2014). We borrow it from its original understanding and take advantage of a possible polysemy to include it in this reflection about the curriculum in an integrated secondary school. In a context in which the technical aspect could be seen as the one that brings consistency, the specificity that seemed to be lacking in regular secondary school courses, there is a risk that the disciplines from this field will become those upon which the importance, the power of such knowledge rests. When it comes to Basic Education, it is intriguing to think of a curriculum in which powerful knowledge is primarily concentrated in areas that are not typical of this educational realm. In a context of disputes over what counts most, this singularity underscores the understanding that the integrated curriculum provides a deconstruction of an established way of doing school, proposing a new movement of teachers and the school community.

3. Integrated Secondary School: a Possible Solution to an Old Problem?

The secondary school has played its part throughout history, seeking to respond to what society expects of it at different times, guided by the priorities of each period. This means it has occupied a place in the educational system between two poles, which have always enjoyed a clearly recognized identity: Elementary School, which focused on education for all, and Higher Education, with its specific fields of knowledge that welcome what will constitute the elites. Secondary school's intermediate position and its non-explicit definition have allowed its steering in different directions and made it the object of disputes and debates in the political and academic fields. Proposals and ideas, coming from both fields, have been rehearsed, some with limited success, foreshadowing what could become a conclusive stage of Basic Education, providing the preparation of youth both in general character and professional introduction. This is the case with the current proposal for Integrated Secondary School.

A seed sown in the 1960s in the state of São Paulo deserves a mention, due to its direct relationship with curriculum design, in a very successful educational experience. The focus of the proposal was junior secondary school, which was then considered part of secondary school. The curriculum should cover the subjects considered basic to the general education provided in regular courses and also subjects that should introduce students to professional practice in the most developed work areas in the country at the time: industrial, commercial, and agricultural, in addition to what was then called domestic practices. To this end, the curriculum was carefully designed, including consultation with parents to choose two of the areas for each school to implement. The preparation of teachers from all areas was done with great care, from the selection of candidates, both licensed teachers and non-licensed ones for the practical areas. The latter received pedagogical training, undergoing a one-semester preparation course specific to the new course. The proposal was implemented for 9 years in 11 public schools in the state, presenting a series of suggestions that could be developed towards the expected formation of a secondary school course. This set of suggestions was to overcome the limitations perceived by a group of experienced and prepared educators who decided to propose a new configuration, unfortunately, interrupted for political reasons. This interrupted what could have been an advance in secondary school in Brazil that had to wait years to resume. Several ideas experimented by this

innovative form of secondary school, the Vocational Secondary School, also inspired proposals developed in different parts of the country, without the specificity of the one tried in São Paulo.

The secondary school continued to rehearse answers to the key question for its definition of identity, which would be a combination of the two cultures to which young people need to be introduced by the end of their education: the general one and the technical or professional one. The unproductivity of the course, explained by the lack of a clear definition of its identity, among other factors, persisted incomprehensibly, as indicated by a study by Moraes and Alavarse (2011). That situation spread throughout the first decade of the 21st century, in which the rate of graduating students does not exceed 22%. It is a serious problem that students who come to this level of education, often with personal and familiar sacrifice, for concluding their schooling cannot have success, failing several times or dropping out.

In terms of guaranteeing and balancing the aspects of general and vocational education to which students are entitled, we conclude that the integrated modality of secondary school is the one offering, in a cohesive and powerful way, a real possibility. Since the 1970s, as mentioned, the integration between the regular and professional curricula was authorized in Brazil. However, there were several attempts that turned out to be insufficient or unbalanced. The main weakness lay in the conception of integration, which essentially did not exist.

It is only from the promulgation of decree 5154 in 2004 that the integrated format for secondary school became possible. With a single enrollment, students have access to an integrated curriculum and to the completion of a whole and unified course. Therefore, Integrated Secondary School presents itself as a possibility of an integral formation, that enables students different paths for their future.

The challenge of integration in the sense that we have been addressing is evident, because it is a process of curricular order, from the perspective of the contents to be taught, but more than that. Also part of what becomes, or needs to become, integrated are the teachers' practices, their daily inter-peer formation (Tardif, 2002), the definitions of the paths to be followed by the students, their assessment, and the whole school culture. The Integrated Secondary School presents itself as a possible way of overcoming some of the limitations of previous proposals, such as: the possibility of technical training for the job market, especially according to the regional demands in a country of continental dimensions like Brazil; adequate and consistent training in the propaedeutic field, enabling students to be able to ensure their decision to seek university access; elimination or softening of the contrast between training for manual work and training for intellectual work. Ciavatta (2012), arguing for the integrated aspect of secondary school, states that “the idea of integrated education suggests surpassing the human being historically divided by the social division of labor between the action of performing and the action of thinking, directing or planning”.

Among the challenges that remain for the establishment of Integrated Secondary School is the education of its teachers. We contend that for the whole of Basic Education, the specificity of teaching as professional knowledge should guide decisions and practices. Once the fundamental role of technical teachers, albeit unlicensed, is recognized, it is urgent to ensure them, as well as to all teachers, specific work-oriented training with strong pedagogical content.

There are already a considerable number of students who have attended the integrated modality of secondary school. In 2019, there were already more than 600 schools in the federal public network of Brazil that offered courses in Basic Education, and, for the most part, the format of technical courses integrated into secondary school prevails. This is the result of policies from progressive governments that have been at the forefront of the country in recent years (2002-2016), increasing the number of 140 technical schools built between 1909 and 2002 to more than 600 (including campuses) in operation today. This expansion of the network included inland, remote parts of the country ("internalization"), which led to the possibility of access to quality and free education in various regions of the country.

Education has always been one of the basic pillars in the discussions about the development problems of Brazil, as a young and very promising country in terms of resources. The secondary school has long entered this scenario, albeit with a not very clearly defined role. This was already identified in a study by Dias (1967), based on a large survey covering the whole country, coordinated by Aparecida Joly Gouveia in 1963, with the objective of knowing the relations between this level of education and the socioeconomic development of the country. Back then, the authors assumed a critical stance stated in the introduction: "One of these mistakes seems to be to consider education as capable of solving all difficulties on its own (...) as if at the touch of the letters of the alphabet all obstacles to development collapsed" (Dias, 1967, p. XIII). The sample consisted of high school establishments of various types (industrial, commercial and agricultural, as well as secondary), divided into samples of their teachers, students, and staff. The study showed important differences, for example, between the education of the teachers from different types of schools. This seems quite suggestive of our current analysis, reminding us that we still come across similar problems.

The theme of secondary education is part of policies that face problems not only linked to curriculum autonomy, but to several other factors on which innovation in the educational field depends, especially teacher education. Through a brief analysis of the secondary school trajectory, we can see how it has been going through mishaps in an attempt to respond to a clear demand to meet the basic education of young people. An Integrated Secondary School seems to meet this demand and we are trying to respond to the very positive call of Lessard and Carpentier (2015) by bringing together the efforts of researchers and policymakers to jointly search for possible solutions. It may be appropriate to recall also a statement by Whitty (2016) dealing with his own country, England, but with some relevance to our country: "The role of the researcher as 'public intellectual' is relatively underdeveloped in English Society, and particularly among education researchers these days "(p. 17). We hope this is becoming less true for us.

References

Avelar, M. (2016). Entrevista com Stephen J. Ball: uma análise de sua contribuição para a pesquisa em política educacional. *Archivos Analíticos de Políticas Educativas, 24*(24), 1-15.

Ball, S. J. (2004). Performatividade, privatização e o pós-Estado do bem-estar. *Educação & Sociedade. Campinas, 25(*89), 1105-1126.

Bourdieu, P. & **Passeron**, J. -C. (1964). Les Héritiers. *Les étudiants et la culture.* Editions de Minuit.

Cabral Neto, A. & **Castro**, A. M. (2011). Gestão escolar em instituições de ensino médio: entre gestão democrática e a gerencial. *Educação & Sociedade. Campinas, 32*(116), 745-770.

Counsell, C. (2018). Taking curriculum seriously. *Impact, Journal of the Chartered College of Teaching*, online.

Dias, J. A. (1967). *Ensino Médio e estrutura sócio-econômica*. MEC Editora.

Ferreti, C. J. (2011). Problemas institucionais e pedagógicos na implantação da reforma curricular da educação profissional técnica de nível médio no IFSP. *Educação & Sociedade. Campinas, 32*(116), 789-806.

Frigotto, G. & **Ciavatta**, M. (2011). Perspectivas sociais e políticas da formação de nível médio: avanços e entraves nas suas modalidades. *Educação & Sociedade. Campinas, 32*(116), 619-638.

Frigotto, G., **Ciavatta**, M. & **Ramos**, M. (Org.) (2012). *Ensino médio integrado: concepção e contradições*. Cortez.

Gouveia, A. J. (1970). *Professoras de amanhã*. Pioneira.

Kuenzer, A. Z. (2011). A formação de professores para o ensino médio: velhos problemas, novos desafios. E*ducação & Sociedade. Campinas, 32*(116), 667-688.

Lessard, C. & **Carpentier**, A. (2015). *Politiques éducatives. La mise en oeuvre*. Presses Universitaire de France.

Lüdke, M. & **Boing**, L. A. (2004). Caminhos da profissão e da profissionalidade docentes. *Educação & Sociedade. Campinas, 25*(89), 1159-1180.

Machado, L. R. (2011). O desafio da formação dos professores para a EPT e PROEJA. *Educação & Sociedade. Campinas, 32*(116), 689-704.

Mainardes, J. (2006). Abordagem do ciclo de políticas: uma contribuição para a análise de políticas educacionais. *Educação & Sociedade. Campinas, 27*(94), 47-70.

Mainardes, J. & **Marcondes**, M. I. (2009). Entrevista com Stephen J. Ball: um diálogo sobre justiça social, pesquisa e política educacional. *Educação & Sociedade. Campinas, 30*(106), 303-318.

Melchior, J. C. (1980). Financiamento da educação no Brasil numa perspectiva democrática. *Cadernos de Pesquisa, 34*, 39-83.

Moraes, C. S. & **Alavarse**, O. M. (2011). Ensino Médio: possibilidades de avaliação. *Educação & Sociedade. Campinas, 32*(116), 807-838.

Moura, D., **Lima Filho,** D. & **Silva**, M. R. (2015). Politecnia e formação integrada: confrontos conceituais, projetos políticos e contradições históricas da educação brasileira. *Revista Brasileira de Educação, 20*(63), 1057-1080.

Nosella, P. (2015). Ensino médio: unitário ou multiforme? *Revista Brasileira de Educação, 20*(60), 121-142.

Pompéia, R. (2000). *O Ateneu*. Editora Martin Claret. (1st Ed. 1888).

Ramos, M. N. (2011). *O currículo para o ensino médio em suas diferentes modalidades: concepções, propostas e problemas. Educação & Sociedade. Campinas, 32*(116), 771-787.

Roldão, M. C. (2007). Função docente: natureza e construção do conhecimento profissional. *Revista Brasileira de Educação, 12*(34), 94-103.

Santos, L. L. (2003). Bernstein e o campo educacional: relevância, influências e incompreensões. *Cadernos de Pesquisa, 120*, 15-50.

Saviani, D. (2003) Choque Teórico da Politecnia. *Trabalho, educação e saúde, 1*(1), 131-152.

Schaffel, S. L. (1999). *O Instituto de Educação do Rio de Janeiro e a construção de uma identidade profissional (1930-1960).* Tese de Doutoramento em Educação. Pontifícia Universidade Católica do Rio de Janeiro.

Tardif, M. (2002). *Saberes docentes e formação profissiona*l. Vozes.

Whitty, G. (2016). *Research and Policy in Education*. IOE Press.

Young, M. & **Lambert**, D. (2014). Knowledge and the future school. *Curriculum, school leadership and social justice.* Bloomsbury.

Young, M. (2011). O futuro da educação em uma sociedade do conhecimento: o argumento radical em defesa de um currículo centrado em disciplinas. *Revista Brasileira de Educação, 16*(48), 609-625.

3.

Participatory Curriculum Design

Why do we need curriculum autonomy? A (re)assertion of relevance as a key-issue in Curriculum Studies

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ABSTRACT
Curriculum autonomy has been claimed for two reasons. Firstly, because it is a pillar of teachers' professionalism. Secondly, because it facilitates responsiveness to students' needs, especially at the local level. The latter reason is based on the assumption that making autonomous decisions about the curriculum, rather than simply following curriculum guidelines issued by educational authorities, is likely to increase the acknowledgement of curriculum relevance. Although relevance is inherent to the very concept of curriculum, issues of curriculum relevance have not been systematically addressed by scholars in the field of Curriculum Studies very frequently. Therefore, this chapter discusses a conceptual model for understanding curriculum relevance.

KEYWORDS
Curriculum autonomy, curriculum relevance, curriculum decision-making.

Introduction

Curriculum autonomy is "the degree of power of given individuals or groups – especially individual teachers or the governing bodies of schools – in determining what students will learn" (Morgado and Sousa, 2010, p. 371).

Assuming that curriculum autonomy can hardly be considered an end in itself, this chapter provides a reflection on the main reasons why it is considered important, which are related to the main functions that it is expected to fulfil. Accordingly, the next section is focused on two important functions: contributing to the consolidation of teachers' professionalism, and facilitating the adaptation of the curriculum to the characteristics of students at the local level.

The latter function is closely related to curriculum relevance, inasmuch as making autonomous decisions about the curriculum, rather than simply following curriculum guidelines issued by educational authorities, is likely to increase the acknowledgement of curriculum relevance.

Considering that issues of curriculum relevance have been predominantly addressed in implicit rather than explicit ways, another section is focused on a conceptualization of curriculum relevance. In fact, a number of scholars in different historical periods have addressed issues of curriculum relevance, but in most cases they reflected on what a relevant curriculum should be, rather than discussing the concept of curriculum relevance itself. Therefore, I propose a conceptualization of curriculum relevance for the curriculum at large, which is based on a model developed within the specific field of Science Education.

1. Reasons why curriculum autonomy is claimed

One of the main reasons why curriculum autonomy for schools and teachers has been claimed is its alleged importance for supporting enhanced teacher professionalism. In fact, professionalism has always been related to autonomy, and also to other key-characteristics of some jobs, especially their social prestige and the high complexity of the tasks involved.

Accordingly, in the 20th century, some Sociologists considered that freedom to practise one's job as one wishes is one of the characteristics of professionals, as compared to mere practitioners of an occupation. In addition to the application of this criterion, professions were distinguished from mere occupations by taking into consideration commitment to an ethics code and control of admission by professional organizations. Musgrave (1979) and other authors used such criteria for discussing the status of teaching as an occupation. Although this approach has been criticized for taking some professions as ideal types, the reinforcement of teachers' autonomy has persistently been presented as a requirement for the enhancement of their professionalism. In this context, freedom to make important choices with regard to the curriculum has been considered one of the key-elements of such enhancement. But, in order to avoid being trapped by questionable assumptions about the distinction between professionals and practitioners, the conceptualization of teacher professionalism must emphasize the uniqueness of teaching.

Teachers' work is unique because of its specific function, which is to make someone learn something (Roldão, 1999), and also because one can hardly find another service that is provided by the same worker to the same clients for so much time (Fernández Enguita, 2001; Morgado, 2005). Students are frequently exposed to the curriculum in the context of long-lasting relationships with teachers and classmates. In this context, teachers' freedom to make important decisions on what students should learn – that is, decisions on the curriculum – is a crucial aspect of their professionalism. Furthermore, the curriculum cannot be fully understood if its experiential dimension is not taken into consideration, by expanding researchers' attention "to thoughts, meanings, and feelings of students as they encounter it" (Schubert, 2008, p. 409).

According to supporters of curriculum autonomy, another reason why it is needed is because it facilitates responsiveness to students' needs, especially at the local level. From this perspective, school-based curriculum development "has great potential to empower teachers to deliver meaningful and relevant curriculum experiences for all students" (Kennedy, 2010, p. 16). The curriculum can hardly be acknowledged as relevant by students if it is unrelated to their experiences. Therefore, diversity between students in schools, in the context of increasingly

multicultural societies, has drawn scholars' attention to a mismatch between the experiences of many of those students and the uniform curricula that have been implemented in educational systems with a centralist tradition (Roldão, 1999).

As Corson (1998) suggests, many students' alienation from the curriculum may also be related to the "pressure towards assimilation that capitalism creates" (p. 3). According to this author, despite the rhetoric that values sociocultural diversity,

> people's real sociocultural identities have little value in the marketplace of that new world. As a consequence, wherever the values and interests of schools are linked tightly into that marketplace, students and teachers from diverse backgrounds find that their interests are still missing from education. Students still feel anonymous and distant from the school's goals. Furthermore, they feel powerless in the face of this anonymity, and the remoteness from the school of their families and communities worsen these feelings of alienation. (Corson, 1998, pp. 3-4)

In the past decades, some educational systems with centralist traditions have decentralized curriculum decision-making to some extent, assuming that schools' and teachers' curricular autonomy might enhance the adequacy of the curriculum to local realities, which, in turn, might lower the above-mentioned alienation.

In Portugal, such a process of decentralization started, very slowly, in the context of the educational reform that was implemented in the late 1980's and early 1990's. The members of a working group that had the specific mission of designing a proposal for new basic and secondary school curricula remarked that there was too much centralism in the system and suggested that small components of the curriculum should be designed by schools, rather than by the central administration (Silva, Emídio, and Grilo, 1990). In fact, the legislation produced in that period allowed schools to take some curricular initiatives, by designing interdisciplinary projects.

In the same period, many scholars called for a vision of schools as educational communities – rather than local providers of a centralized service, without identities of their own (Formosinho, 1989) –, and for the development of school-based educational projects which could contribute to the enrichment of schools' autonomy (Alves, 1993; Barroso, 1992; Carvalho and Diogo, 1994; Costa, 1992; Macedo, 1991).

In the transition from the 20th to the 21st century, there was a stronger call for curriculum autonomy in Portugal. A national project on flexible management of the curriculum paved the way for new legislation, which provided more space for integrated approaches to the traditional subjects and encouraged the development of school-based curricular projects. In addition, a regional curriculum started to emerge in the Azores Islands.

The above-mentioned initiatives did not overcome centralist approaches to curriculum policy in Portugal (Morgado, 2000; Morgado and Sousa, 2010; Sousa, 2013). However, such persistent centralism has become increasingly acknowledged as a problem. Accordingly, bolder initiatives related to curriculum autonomy have been taken since 2017, especially the implementation of the national project "Curriculum Autonomy and Flexibility" and the publication of legislation

that follows its rationale. In the context of these initiatives, schools are now allowed to differentiate up to 25% of the national curriculum. The implementation of an Essential Core Curriculum is another fundamental piece of this set of initiatives. By considering such core curriculum – which is structured around sets of essential competences that the students are expected to develop in each subject – the main official guide for curriculum development in schools, the government expects to relief subordination to detailed syllabi and, consequently, to increase flexibility. Related initiatives taken in the same period include the consolidation of a national strategy for citizenship education (Monteiro et al., 2017), and the publication of an official document that states general principles, areas of competence and values that are expected to guide curriculum development in basic and secondary schools – The Students' Profile by the End of Compulsory Schooling (Oliveira Martins et al., 2017).

As suggested in the previous paragraphs, initiatives related to curriculum autonomy in Portugal have become increasingly ambitious. But the importance of autonomy for the enhancement of schools' responsiveness to the students' needs vis-à-vis the curriculum has always been emphasized. In fact, many authors have reflected on this issue in different periods of the recent history of curriculum policy in Portugal.

In the context of the reform that was implemented near the end of the 20th century, Pacheco (1995) stated that "a cultural standardization for a community can only be tolerated when curriculum policy respects cultural diversity, which implies openness to regional and local options, and also attention to differences between individuals and cultural groups" (p. 96). Such openness and attention, in turn, require a commitment to contextualization.

The importance of contextualization and its dependence on autonomy were emphasized by Leite (2001) in her comments on the curriculum policy implemented in Portugal at the beginning of the 21st century:

> Contextual construction of the curriculum requires that schools and teachers take responsibility for assuming that not everything is prescribed at the national level, and it also requires that curriculum development is based on real situations. Therefore, it entails negotiation between the national and the local levels. (p. 34)

More recently, at a time when the post-2017 Portuguese curriculum policy became one of the main topics addressed by Portuguese curricularists, Morgado and Silva (2019) advocated the same ideas, by stating that contextualization allows for a strong connection between school knowledge, local reality and students' experiences, that is, it "allows for an adaptation of the curriculum to students' real context" (p. 140). Such adaptation is needed because the formal curriculum tends to represent the dominant culture, which, to some extent, may become an obstacle for students who are immersed in other cultures. Therefore, learning is facilitated by educational practice that uses references and materials that can be understood by students from different cultural backgrounds, and, at the same time, makes those students more familiar with the culture that is conveyed by the formal curriculum. In other words, learning tends to become more inclusive and effective if students' cultures are taken into consideration. Cultural identity is a source of relevance, and relevance entails effectiveness in learning: "one

learns when one acquires new knowledge, and only when such knowledge is significantly incorporated into the cognitive resources that people use in order to act, understand and learn more" (Roldão, 2013, p. 20).

In short, we need curriculum autonomy because it is necessary for contextualizing the curriculum, and contextualization, in turn, is necessary as a tool that enables students to acknowledge curriculum relevance.

2. Understanding relevance as a criterion for curriculum decision-making

Relevance is "inherent to the very concept of curriculum" (Roldão, 2013, p. 19) because the curriculum is, ultimately, what the society as a whole expects students to learn, despite conflicts between social groups about what should be taught in schools. However, issues of curriculum relevance tend to be addressed by scholars in the field of Curriculum Studies in implicit rather than explicit and systematic ways.

At the embryonic stage of the history of Curriculum Studies, by asking "What knowledge is of most worth?", Spencer (1866) committed himself to reflect on the selection of knowledge that should be included in the curriculum. Accordingly, an academic interest for curriculum relevance is implicit in Spencer's question, and also in the answer that he proposed, which consists, to a large extent, on criteria for deciding what to teach.

In the period of emergence and consolidation of Curriculum Studies as an autonomous field, one of the main assumptions underlying the work of Bobbitt (1918) and other influential scholars was that a relevant curriculum is a curriculum that fulfils the needs of society. Tyler (1949), one of the most influential curriculum theorists of the 20th century, assumed the same, to some extent, inasmuch as he suggested that relevant curricula are expected to be organized around objectives derived from studies of contemporary life outside the school. But he also considered two additional sources of educational objectives: studies of the learners themselves and contributions from subject specialists.

Other authors have implicitly suggested other criteria of relevance, aligned with their own conceptualization of curriculum and curriculum theory. For example, critical theorists are likely to ask for whom the curriculum is relevant, to critically examine the process of knowledge selection, to discuss the relations of power implied in such selection, and to encourage emancipatory action whereby curriculum relevance is pursued in light of students' rights. From this perspective, as Apple (1990) states,

> curriculists must take an advocacy position on a number of critical fronts, both in and outside of education. Among the most important 'internal' stances would be that of support for student rights (and the democratic rights of teachers, oppressed groups, and others). Since curriculum as a field has as one of its primary concerns the task of creating access to knowledge and tradition, especially those areas that have been victims of selective tradition, the question of a student's right to have free access to politically and culturally honest information and to public

> expression based on this cannot be divorced from our own pursuit of just educative environments. (pp. 163-164)

In short, we can find, across the history of Curriculum Studies, significant assumptions on what a relevant curriculum should be, but systematic discussions of the concept of curriculum relevance itself have been rare. However, some important conceptualizations have emerged in the first decades of the 21st century.

Roldão (2013) emphasizes the importance of cognitive relevance of the curriculum for the student. From this perspective, a relevant curriculum ensures meaningful learning, that is, the incorporation of new knowledge into the student's cognitive structure. According to this author, such incorporation is influenced by five variables: significance for individual cognitive development; identification, projection and enhancement of previous interests; perceived social usefulness; relation to the learner's cultural identify; connection between different elements and types of knowledge.

Other researchers have conceptualized curriculum relevance in the specific context of certain curricular areas. For example, Sealey and Noyes (2010) consider four kinds of curricular relevance in Mathematics Education: practical relevance (usefulness of knowledge in the present), process relevance (transferability of knowledge into new contexts), professional relevance, and political relevance.

More recently, Stuckey, Hofstein, Mamlok-Naaman and Eilks (2013) proposed a model for the analysis of curriculum relevance within the field of Science Education. The model is organized around three dimensions of relevance: individual, societal, and vocational. Each dimension is crossed by two axes. One of them considers the tension between curriculum relevance in the present and curriculum relevance for the future; the other one is based on a distinction between intrinsic and extrinsic perspectives of relevance. From an intrinsic perspective, curriculum relevance is the satisfaction of the students' interests, whereas from an extrinsic perspective curriculum relevance is the effectiveness of curriculum in helping students meet social or institutional expectations. Although the authors apply this model to Science Education only, I have suggested that it should be generalized to the analysis of the whole curriculum (Sousa, 2018). In the rest of this chapter, I will further advocate such generalization.

According to Stuckey, Hofstein, Mamlok-Naaman and Eilks (2013), the individual dimension of relevance in Science Education "encompasses matching the learners' curiosity and interests, providing students with necessary and useful skills for coping with their everyday lives today and in the future, and contributing to the development of intellectual skills" (p. 18). There is no reason why the same assumption should not be made about the whole curriculum. Stating that the individual dimension of relevance consists of satisfying the students' curiosity, interests and needs makes as much sense for Science Education as it does for any curricular area.

The authors suggest that the societal dimension of relevance in Science Education is ensured by the "preparation of pupils for self-determination and a responsibly led life in society by understanding the interdependence and interaction of science and society, developing skills for

societal participation and competencies for contributing to society's sustainable development" (Stuckey, Hofstein, Mamlok-Naaman and Eilks, 2013, p. 18). These ideas can be adapted to the curriculum at large by stating that the societal dimension of relevance encourages students to use the knowledge that they acquire in school for contributing to society's development.

Stuckey, Hofstein, Mamlok-Naaman and Eilks (2013) also state that "the relevance of science education in the vocational dimension is composed of offering orientation for future professions and careers, preparation for further academic or vocational training and opening up formal career chances" (p. 18). Again, there is no reason why these ideas should not be applied to the whole curriculum. One can easily generalize them by stating that the vocational dimension of curriculum relevance is the contribution of the curriculum to the development of students' ability to find rewarding jobs and careers.

Table 1 presents a schematic representation of the model proposed by Stuckey, Hofstein, Mamlok-Naaman and Eilks (2013). My proposal for the adaptation of this model to the curriculum at large is presented in Table 2. Besides trying to maximize compatibility with any curricular area, I tried to make the scheme more easily readable by curriculum researchers and decision-makers in a consistent way.

Stuckey, Hofstein, Mamlok-Naaman and Eilks (2013) present examples of achievements that can be facilitated by different variants of curriculum. The first example is "Good marks in school", as an achievement facilitated by the individual dimension of curriculum relevance in the present from an extrinsic perspective.

Table 1. Model proposed by Stuckey, Hofstein, Mamlok-Naaman and Eilks (2013).

		PRESENT	FUTURE
INDIVIDUAL	EXTRINSIC	Good marks in school	Acting responsibly and solidaric in the future
	INTRINSIC	Satisfying curiosity and interest	Skills for coping with personal life in the future
SOCIETAL	EXTRINSIC	Learning how to behave in society	Behaving as a responsible citizen
	INTRINSIC	Finding one's own place in society	Promoting own interests in societal discourse
VOCATIONAL	EXTRINSIC	Passing exams qualifying for coming education	Contributing to society's economic growth
	INTRINSIC	Orientation about potential careers	Getting a good and well paid job

Instead, I present characteristics of relevant curricula in the 12 variants of curriculum relevance. According to this logic, readers may start with the phrase "A relevant curriculum" and then add one of the phrases contained in the 12 cells of Table 2 that represent those variants. For example, "A

relevant curriculum ensures that students learn what they are expected to learn" (individual dimension, present, extrinsic perspective) and "A relevant curriculum allows students to reconcile their interests with the needs of society" (societal dimension, future, intrinsic perspective), and so on.

Table 2. Suggested adaptation of the model proposed by Stuckey, Hofstein, Mamlok-Naaman and Eilks (2013).

		PRESENT	FUTURE
INDIVIDUAL	EXTRINSIC	Ensures that students learn what they are expected to learn	Encourages students to continue learning across their lifespan
	INTRINSIC	Satisfies students' curiosity and interest	Enhances long term personal fulfilment
SOCIETAL	EXTRINSIC	Contributes to the students' integration in society	Encourages students to contribute to the development of society
	INTRINSIC	Helps students understand their roles in society	Allows students to reconcile their interests with the needs of society
VOCATIONAL	EXTRINSIC	Ensures that students understand the world of work	Encourages students to contribute to society's economic growth
	INTRINSIC	Promotes students' awareness of potential careers	Helps students get a good and well-paid job

Such kind of reading is likely to facilitate both the work of researchers who want to study issues of curriculum and the work of decision-makers who are interested in enhancing the relevance of curriculum. The scheme provides a broad and concise picture of curriculum relevance from different perspectives, and helps readers keep in mind a variety of aspects of relevance that should be taken into consideration.

Conclusion

One of the main reasons why there have been many calls for the enhancement of curriculum autonomy is the assumption that it facilitates the adaptation of the curriculum to the characteristics of students. By assuming that the characteristics of students require adaptation of the curriculum one also assumes that the curriculum should be relevant from the students' perspective, as well as relevant for society.

Therefore, a clear conceptualization of curriculum relevance is needed, in order to facilitate the work of decision-makers who are willing to enhance it. Considering that such conceptualization is rare in the literature, I have tried to contribute to its development, by proposing and discussing a model, which is an adaptation of a model developed by Stuckey, Hofstein, Mamlok-Naaman and Eilks (2013) in the specific context of Science Education.

Such adaptation kept the original matrix and slightly changed the logic and the language that is expected to be used for representing different variants of curriculum relevance. Each variant

has been described in terms of the characteristics that a relevant curriculum should have when one takes different dimensions of relevance – individual, social, vocational – into consideration, and also when one considers both (1) a tension between relevance in the present and relevance for the future and (2) a tension between relevance from an intrinsic perspective and relevance from an extrinsic perspective. The outcome is a model that might be easily used by researchers for studying issues of curriculum relevance, and by decision-makers in order to ensure that curriculum development takes important aspects of relevance into consideration.

Envisaging possibilities of accommodating analysis of the curriculum at large in the logic of the original model was easy, which suggests that it really has potential for being used beyond Science Education. In order to eventually consolidate this model, it is necessary to test it in empirical studies.

References

Alves, J. M. (1993). *Organização, gestão e projecto educativo das escolas* (2nd Ed.). ASA.

Apple, M. (1990). *Ideology and curriculum* (2nd Ed.). Routledge.

Barroso, J. (1992). Fazer da escola um projecto. In R. Canário (Org.), *Inovação e projeto educativo de escola* (pp. 17-55). Educa.

Bobbitt, F. (1918). *The curriculum*. Houghton Mifflin.

Carvalho, A. & **Diogo**, F. (1994). *Projecto educativo*. Afrontamento.

Corson, D. (1998). *Changing education for diversity*. Open University Press.

Costa, J. A. (1992). *Gestão escolar: participação, autonomia, projecto educativo da escola* (2nd Ed.). Texto Editora.

Fernández Enguita, M. (2001). La busca de un modelo profesional para la docencia: liberal, burocrático e domocrático? *Revista Iberoamericana de Educación, 25*, 43-64.

Formosinho, J. (1989). De serviço de Estado a comunidade educativa: uma nova concepção para a escola. *Revista Portuguesa de Educação, 2*(1), 53-86.

Kennedy, K. (2010). School based curriculum development for new times: a comparative analysis. In E. Law and N. Nieveen (Eds.), *Schools as curriculum agencies: Asian and European perspectives on school-based curriculum development* (pp. 3-19). Sense Publishers.

Leite, C. (2001). A reorganização curricular do ensino básico – problemas, oportunidades e desafios. In C. Varela de Freitas, C. Leite, J. C. Morgado and M. O. Valente (Orgs.), *A reorganização curricular do ensino básico – fundamentos, fragilidades e perspectivas* (pp. 29-37). ASA.

Macedo, B. (1991). Projecto educativo de escola: Do porquê construí-lo à génese da construção. *Inovação, 4*(2-3), 127-139.

Monteiro, R. et al. (2017). *Estratégia nacional de educação para a cidadania*. XXI Governo Constitucional.

Morgado, J. C. (2000). *A (des)construção da autonomia curricular.* ASA.

Morgado, J. C. (2005). *Currículo e profissionalidade docente.* Porto Editora.

Morgado, J. C. & **Silva**, C. (2019). Articulação curricular e inovação educativa: caminhos para a flexibilidade e a autonomia. In J. C. Morgado, I. C. Viana and J. A. Pacheco (Orgs.), *Currículo, inovação e flexibilização* (pp. 129-148). De Facto Editores.

Morgado, J. C. & **Sousa**, F. (2010). Teacher evaluation, curricular autonomy and professional development: trends and tensions in the Portuguese educational policy. *Journal of Education Policy, 25*(3), 369-384.

Musgrave, P. W. (1979). *The sociology of education*. Routledge.

Oliveira Martins, G. et al. (2017). *Perfil dos alunos à saída da escolaridade obrigatória*. Ministério da Educação.

Pacheco, J. A. (1995). *Da componente nacional às componentes curriculares regionais e locais*. Ministério da Educação.

Roldão, M. C. (1999). *Os professores e a gestão do currículo: perspectivas e práticas em análise*. Porto Editora.

Roldão, M. C. (2013). O que é um currículo relevante? In F. Sousa, L. Alonso and M. C. Roldão (Orgs.), *Investigação para um currículo relevante* (pp. 15-28). Almedina.

Schubert, W. (2008). Curriculum Inquiry. In F. Connelly (Ed.), *The SAGE handbook of curriculum and instruction* (pp. 399-419). SAGE.

Sealey, P. & **Noyes**, A. (2010). On the relevance of the mathematics curriculum to young people. *The Curriculum Journal, 21*(3), 239-253.

Silva, J. F., **Emídio**, M. T. & **Grilo**, E. M. (1990). Proposta de reorganização dos planos curriculares do Grupo de Trabalho: Relatório final – 1.ª e 2.ª fases. In CNE (Org.), *Pareceres e recomendações 88-89, Vol. II* (pp. 465-553). CNE.

Sousa, F. (2013). Portugal – the mirage of curricular autonomy. In W. Kuiper and J. Berkvens (Eds.), *Balancing curriculum regulation and freedom across Europe* (pp. 189-210). SLO.

Sousa, F. (2018). Using action research and an imported conceptual framework to study the individual dimension of curriculum relevance. In J. Calder and J. Foletta (Eds.), *(Participatory) action research: principles, approaches and applications* (pp. 151-176). Nova Science Publishers.

Spencer, H. (1866). *Education: intellectual, moral and physical*. D. Appleton and Company.

Stuckey, M., **Hofstein**, A., **Mamlok-Naaman**, R. & **Eilks**, I. (2013). The meaning of 'relevance' in science education and its implications for the science curriculum. *Studies in Science Education, 49*(1), 1-34.

Tyler, R. (1949). *Basic principles of curriculum and instruction*. The University of Chicago Press.

Collaboration between teachers' associations on the curriculum design of essential learning in Portugal

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ABSTRACT
The invitation extended in 2016 by the Portuguese Ministry of Education to the teachers' associations (TAs) to participate in the process of defining the Essential Learning (EL) was unprecedented. In this chapter, we intend to explore the dynamics of interaction between TAs in the same subject area and identify the activities performed and the outputs produced by the TAs during the process. The study's methodology consisted of a social network analysis, which allowed us to detect the structure of social relationships and interaction patterns and represent them graphically. We prepared a network analysis questionnaire applied to the eighteen TAs that participated in the elaboration of the EL. The application of focus groups confirmed the answers. For the graphical representation, we used Gephi 0.9.2. The results show that collaboration in the elaboration of the EL occurred mainly within the teams of the various associations, which shows that the teachers (that comprise the TAs) still have few habits of collaboration with each other, particularly regarding curricu lum design. While drafting the EL, TAs used a variety of curriculum reference documents produced in Portugal over the course of thirty years – this was also an inhibiting factor for collaboration. Looking at the activities developed by the TAs, it was clear that there was little discussion on pedagogical practices, the *theoretical literature* on the subject and on *curriculum/curriculum design*, as well as a scarcity of pedagogical products.

KEYWORDS
Collaboration, essential learning, curriculum autonomy policies, curriculum design, teachers' associations.

Introduction

The participation and engagement of teachers in processes that originate public policies in education have been increasingly appreciated to the extent that it became a trend in the 21st century. Regarding the implementation of processes of curriculum design, development and innovation, there are studies in the literature on teachers' involvement in curriculum development at the local level (meso- and micro-level – school and classroom), but not in its design at the national level (macro-level). There is also little research documenting teachers' involvement and participation in central and prescriptive curriculum design processes that analyse those processes.

This study explores the elaboration process of the more recent Portuguese national curriculum framework for primary and secondary education – entitled EL – and its main objectives are to understand the dynamics of interaction between teachers' associations in the same subject area during this process and to identify the activities performed and the outputs produced by the associations during the process.

For the preparation of the EL, the Portuguese Ministry of Education (ME) invited the various teachers' associations (TAs) to occasional extended meetings that converged into smaller working groups. The associations also met regularly in small subgroups with technical support teams from the Directorate-General for Education (DGE) of their respective areas. We do not wish to address here this process of supervised interaction. Instead, this study intends to investigate the dimension of the interactions between the teachers' associations of the same subject area (languages, sciences and technologies, artistic expressions, and social sciences)[1] that have occurred on their own initiative, beyond the scope of the initiatives sponsored by the ME to coordinate the production of the curriculum subject documents.

This study has only included the eighteen teachers'[2] associations that participated in the elaboration of the EL and did not consider scientific societies or syllabus authors, who were occasionally invited to participate in the process[3].

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[1] Languages: this area includes subjects such as Portuguese, English, Foreign Language II (German, Spanish, French), Portuguese as a Second Language, Latin A and B, Greek, Portuguese Literature, Classical Literature, Portuguese Language Literature; Artistic Expressions: Art Education, Physical Education, Visual Education, Musical Education, Drawing A, Descriptive Geometry, Arts Workshop; Sciences and Technologies: Mathematics, Environmental Studies, ICT, Natural Sciences, Technological Education, Materials and Technology, Computer Applications B, Multimedia Workshop B, Biology and Geology, Applied Mathematics for Social Sciences, Biology, Geology; Social Sciences: History and Geography of Portugal, History, Geography, Philosophy, History and Art Culture.

[2] Almost all the teachers' associations: ANPRI – Associação Nacional de Professores de Informática; ANPROPORT– Associação Nacional de Professores de Português; APECV – Associação de Professores de Expressão e Comunicação Visual; APEM – Associação Portuguesa de Educação Musical; APEVT – Associação Nacional de Professores de Educação Visual e Tecnológica; APF – Associação de Professores de Filosofia; APG – Associação de Professores de Geografia; APH – Associação de Professores de História; APLG – Associação de Professores de Latim e Grego; APM – Associação de Professores de Matemática; APP – Associação de Professores de Português; APPA – Associação Portuguesa de Professores de Alemão; APPBG – Associação Portuguesa de Professores de Biologia e Geologia; APPELE - Associação Portuguesa de Professores de Espanhol Língua Estrangeira; APPF - Associação Portuguesa de Professores de Francês; APPI - Associação Portuguesa de Professores de Inglês; APROGED – Associação de professores de Desenho e Geometria Descritiva; CNAPEF – Conselho Nacional das Associações e Profissionais de Educação Física.

On the one hand, the research problem of this study is trying to understand how the individual work rationale that underpins the teachers' work was overcome in this curriculum development process that was expected to be collaborative and for which teachers, represented by the TAs, had been invited. On the other hand, we intend to examine how the associations dealt with the situations of conflict raised by the coexistence of multiple curriculum reference documents in Portugal, which have become a fragmented set in the course of the three decades that have elapsed since the Roberto Carneiro Reform was implemented.

In order to focus on solving the problem, we formulated the following research questions: What patterns of social interaction have teachers' associations from similar subject areas (languages, sciences and technologies, artistic expressions, and social sciences) established with each other? What activities did they develop together? What curriculum references did they use? What outputs of these relational dynamics were produced during the production of the EL? How can these relational dynamics contribute to enriching teachers' curriculum practices?

1. Curriculum autonomy policies: the participation of teachers' associations in the construction of the EL

Within a framework aiming at redefining and building a common curriculum benchmark for the non-higher education system, the design of a set of curriculum reforms and changes started to take shape in Portugal in 2016 with the implementation of various educational measures. In this context, the *Students' Profile by the End of Compulsory Schooling* (Order No. 6478/2017) (SP) was approved in July 2017, defining the acquisition of a set of skills as a curriculum benchmark to be adopted by policymakers and educational agents and to be taken into account in the development of the EL. The vision of EL as recommended by the OECD in the *OECD Future of Education and Skills 2030* project was then recovered and implemented in the Portuguese context, thus creating the conditions for a common set of learning content to be achieved by every student – *Essential Learning* – even in the face of the complexity of contexts, with the further possibility of consolidating, deepening and enriching that body of knowledge at the local level, enabling different pedagogical approaches.

The EL constitute 'the common knowledge to be acquired, i.e., the contents of subject-structured knowledge, indispensable, conceptually organised, relevant and significant, as well as skills and attitudes that must be developed by every student in each subject area or subject, generally referring to the year of studies or training' (Order No. 5908/2017, Article 2(b)). These are curriculum guidance documents for the planning, implementation and assessment of teaching

[3] The ME invited the authors of the respective syllabuses to prepare the EL for the subjects of Economics A and C, Law and Sociology, because the Associação de Professores de Ciências Económico-Sociais (APROCES) was not constituted at the time of that invitation: its president took up office on 15 September 2017. For the secondary school subjects: Moral and Religious Education, Physics, Physics and Chemistry A, Chemistry, Mandarin and Materials and Technologies, the ME technical teams drafted the respective EL. The scientific associations of Physics, Chemistry (there is no professional association) and Philosophy were also invited to write the EL; the latter integrated the team of the Associação de Professores de Filosofia, at the association's request.

and learning and aim at fostering the development of skills in the areas included in the SP. The approval of these documents did not immediately imply the revocation of the other curriculum documents in effect.

At the end of the 2015-2016 school year, in order to collect teachers' perceptions of the existing curriculum framework, as well as its limitations and implications, a national survey of teachers was conducted. Survey results have shown that teachers clearly consider the curriculum too long, obstructing the development of diversified pedagogical approaches, and too prescriptive regarding the content to be acquired by students (hindering the inclusion of every student). As a result, in April of that same year, the conference *Curriculum for the 21st century: competencies, knowledge and values in a 12-year education system*[4] took place, offering the points of view of teachers' associations as well as national and international experts.

The process of drafting the EL began in October 2016 with the invitation extended to eighteen teachers' associations, two scientific societies (Physics and Chemistry) and some authors of syllabuses of those subjects for which there was no corresponding association. This invitation had the clear intention of involving the representatives of teachers in the construction of a curriculum that should be appropriated by them, taking into account the existing documents and what was known about practices and schools. To support the elaboration of the EL, technical teams of the ME were assigned to each subject, essentially composed of basic and secondary school teachers. At the same time, the Ministry promoted meetings for interdisciplinary work, discussion, and reflection on the existing curriculum policy.

The purpose of reducing curricular overload, metioned in many recommendations and studies, particularly those of the OECD, along with the rationalisation around what is essential to be acquired, paved the way to the ME's initial practical recommendations for the operationalisation of the EL, e.g., the suggestion to try to write the EL of each subject on a single sheet of paper, which clearly was not to be taken literally but rather to promote economy and curriculum essentiality as opposed to the excessive size of the syllabuses (or curriculum documents in place). Throughout the process, this strict limit was abandoned.

In May 2017, given the emerging difficulties and the different understandings of the various teams, the ME hired three curriculum experts to produce a theoretical framework document with guidelines on the curriculum model implicit in the ME's proposal, including a *template* to support the writing of the EL (Roldão, Peralta & Martins, 2017), as well as to support the working groups in designing the curriculum – which was intended to be developed in a coherent way avoiding a segmented vision. This *template* suggested that the introduction of the EL included the brief definition of a subject-specific rationale (identification of the organizing ideas and core concepts of each discipline by year/cycle) and the explicitness of the curriculum justification, especially the contributions of the subject to the achievement of the SP. In the template provided, some key points guiding the development of the EL were defined and organised into four columns/

[4] For information on the conference, please check: http://www.dge.mec.pt/conferencia-curriculo-para-o-seculo-xxi-competencias-conhecimentos-e-valores-numa-escolaridade-de-12

categories: (a) identification of the purposes and contribution of each subject/area to the construction of the EL; (b) identification of the thematic areas/subject/grade/cycle and respective EL – integrating targeted knowledge, skills and attitudes (vertically and horizontally), combined in line with the EL; (c) elaboration of recommendations regarding cognitive operations that students should master on the different contents; and (d) elaboration of guidelines on strategic teaching actions appropriate to the stated purposes in terms of the promotion of EL (Figure 1).

Figure 1. Template to operationalise the Essential Learning.

IMPLEMENTATION OF **ESSENTIAL LEARNING**

Organiser Topic	EL: Knowledge, Skills and Attitudes The student should be able to:	Strategic teaching actiongeared towards the profile of students (Examples of actions that should be carried out in the subject)	Descriptors of the profile of students

Source: Adapted from Roldão, Peralta and Martins (2017).

Thus, a reference base was established to combine the EL with the SP (Roldão, Peralta & Martins, 2017), which was expected to be challenged and enriched with the work of the schools that were voluntarily involved in this transformative process for the 2017-18 school year. In the first stage, the EL were written down in the form of working documents for the first years of each cycle/level of studies and were sent to the 234 schools that participated in the Autonomy and Curriculum Flexibility Project in August 2017. The aim was to test and improve the EL with the work developed by schools by starting to implement them and enabling the working groups responsible for their elaboration to understand how the documents were being read and appropriated by teachers. This methodology proved essential for the consolidation of the final documents that included every school year.

After public consultation, the drafting of the EL for every year of Basic Education (Order No. 6944-A/2018 of 19 July) and the Scientific-Humanistic Courses of Secondary Education (Order No. 8476-A/2018 of 31 August) was completed in 2018.

2. Teacher involvement in curriculum design at the macro-level: inter-teacher collaboration and inter-teachers' association collaboration, and production of curriculum documents

2.1. Inter-teacher collaboration

In the literature, teachers' involvement in processes leading to the formulation of educational policies is considered a decisive factor in the implementation of such policies since it contributes to the improvement of these processes by incorporating teacher expertise. Several authors agree that teachers' involvement in the implementation of processes of curriculum design, development and innovation has a considerable impact on these processes (Oliva, 2005) and is actually essential for the success of educational reform efforts (Fullan, 2001) – given that the

curriculum has to be implemented by teachers, its design clearly benefits from their classroom experiences (Marsh & Willis, 1995) and perspectives (Doll, 1996). Carl (2009) noted that teachers should not be mere implementers of the curriculum. Teachers' active participation in the curriculum development process, both at central and local level, positively influences its successful implementation (Young, 1989; Baş & Şentürk, 2019; Drew, Priestley & Michael, 2016; Priestley, Crick & Hizli Alkan, 2019; Priestley, Alvunger, Philippou & Soini, 2021; Alvunger, Soini, Philippou & Priestley, 2021).

In the transition from an individual work rationale to a collegial and representative one, balance and complementarity are sought between the development at the individual and collective levels, actors and organisation (Scheerens, 2010), in a perspective of professional development bidirectionally interrelated with organisational development (Almeida, 2012). Teachers' participation and involvement in professional development processes, including curriculum design and development processes, has been more valued and became a clear trend at the beginning of the 21st century.

There are different practices of teacher participation in curriculum design and development worldwide, both individually and collaboratively, from curriculum design to the production of curriculum materials (e.g., USA, Australia, Finland, China, Netherlands, Nepal, Tanzania). This is the case in Nordic countries that have a tradition of fostering shared curriculum development work, including schools and teachers. Moreover, in Finland, for example, even local authorities have been involved. However, there is little research documenting this involvement and participation of teachers in the design of the prescriptive curriculum, and there are no studies on the analysis of these processes either. Studies on teachers' involvement in curriculum development at the local level (meso- and micro-level – school and classroom) are identified in the literature but not in its design at the national level (macro-level).

Although support for the participation of teachers in curriculum development process has been increasing (e.g., Carl, 2005; Doll, 1995; Oliva, 2005; Ornstein & Hunkins, 2009; Voogt, Pieters, & Handelzalts, 2016; Young, 1990), the research literature in this field reports that teachers face several problems when called into the curriculum design process (e.g., Carl, 2005; Handelzalts, 2009; Hoogveld, 2003; Oloruntegbe et al., 2010;), which are mainly due to the gap in knowledge and skills needed to implement collaborative design processes. Specialised curriculum knowledge is one of the types of teachers' professional knowledge identified by several authors within the study of professional knowledge and competencies for teaching (Bernstein, 1971; Elbaz, 1991; Perrenoud, 2000; Shulman, 1987; Tardif, 2002). However, this type of knowledge is scarce, as observed in the difficulties experienced in this type of work (which is a critical aspect in teachers' professionalism and teacher education (Priestley & Drew, 2019; Handelzalts, 2009), namely in Portugal (Almeida & Viana, in press), which is mainly geared towards compliance with a pre-established curriculum.

Collaborative design positively influences professional development and the implementation of curriculum change (Drake, Land & Tyminski, 2014; Simmie, 2007; Voogt et al., 2011) because teachers develop skills and take ownership of change (Voogt & Handelzalts, 2016). Therefore, it is important to analyse how teachers' involvement in curriculum design at the macro-level through their professional associations has been characterised in Portugal.

2.2. Individual teachers' work rationale in the Portuguese education system and subject-based associations

Teachers' associations, that accepted the invitation to participate in the construction of the EL, were confronted with another type of challenge while participating in the resulting curriculum design process: the tension between the founding principles of the curriculum model underlying the EL – a model guided by the principle of unity of the curriculum, of the transversal skills to be developed throughout compulsory education required by the EL – and the subject-based organisation underlying the very designation and composition of TAs in Portugal. This understandably caused some tension among the producers of the EL. Despite this contradiction, at least apparent, between a holistic and transversal curriculum perspective and a tradition of subject-based individualism, we would expect some interaction between the various subjects in the curriculum design process mediated by the TAs. The network methodology we have employed in this study attempts to analyse this interaction

Teachers were one of the first professional groups to organise themselves into associations[5] in Portugal. Unlike teachers' associations in other countries (organised by level of education, course type or even gender[6]), a subject-based rationale marked the constitution of teachers' associations in Portugal. The expansion of the TAs has been based on the overvaluation of knowledge in the specific scientific area – favouring specialised knowledge over other areas of knowledge – which resulted in a tradition of autonomous functioning of each association, interested above all in the promotion of its subject among its members, and also in the recognition of work and curriculum conditions by the ME, particularly visible in the struggle for the workload of the respective subject and for the relative importance in the students' transition/retention policies. The associative work is developed individually, with little openness to collaborative initiatives, with the exception of some specific initiatives, such as the creation of the Secretariado Inter Associações de Professores (SIAP) in 1992, which organised some meetings and produced a number of publications (Niza, 2009; Abrantes, 1994) and the Federação Nacional de Associações de Professores de Línguas Vivas (FNAPLV)[7], founded in 1989. However, it was not the collective desire but the individual interest that sometimes translated into a conflict between several subjects and their associative representatives, especially in issues related to the curriculum system and assessment policies.

This subject-by-subject approach was in line with the tradition of the Portuguese education system prior to 1974 that was based on the individual work of each teacher, on the assumption that the scientific education of each teacher made him/her responsible for teaching their respective subject, which influenced the creation of teachers' associations. This was the prevailing *modus operandi* and strengthened the vision of the curriculum in place at the time as the sum of a set

[5] (Boto, 2018, p. 17).

[6] In England, for example, there are associations for primary school teachers, two associations for secondary school teachers, one for male teachers, the other for female teachers; there is also an association for technical schoolteachers, etc.

[7] The National Federation of Modern Language Teachers' Associations is made up of: Portuguese Teachers' Association (APP), Portuguese Association of Spanish Teachers (APPELE), Portuguese Association of German Teachers (APPA), Portuguese Association of French Teachers (APPF), Portuguese Association of English Teachers (APPI).

of segmented subjects, each associated with a teaching knowledge focused on the scientific domain of that area of knowledge. Additionally, in the organisation of the teaching work, individual action was predominant, collegiality was rare, and teaching meetings were not compulsory – and, when they did take place, they were mainly intended to discuss grades at the end of the term or school year or to deal with bureaucratic aspects.

It was under the guidance of the Veiga Simão Ministry (1970-1974), following the expansion of compulsory education to six years in 1964[8] and the creation of Preparatory Cycle (1967[9]) that, at the same time as the Reform that was associated with his name was being prepared and launched (1973)[10], the obligation to hold collegial meetings of teachers – class council and subject council meetings on a monthly basis – with a pedagogical and scientific scope was consolidated for the then Preparatory Cycle of Secondary Education (CPES - current 5th and 6th years of schooling), as prescribed in the *Teaching Profession Career Statutes of CPES* (1968, articles 14 and 17)[11]. The positions of Class Director and Subject Delegate were also created, instituting for the first time intermediary leadership in the school organisation. In secondary education – which at the time started in the current 7th year[12] – this practice was only introduced later, following the gradual expansion of compulsory education to the following cycles of studies.

The transformations of the Portuguese education system after the 25th of April Revolution with repercussions on the curriculum plan highlighted the importance of a collegial and representative work rationale in schools, giving visibility to collective teacher movements, both on an associative and a union level, with the consequent creation of the first teachers' associations after 1974.

Although teachers' associations have developed mainly from the second half of the 19th century onwards, with the creation of the first teachers' association dating back to 1854 (Pintassilgo, 2013), this trend intensified and became more visible in the 1980s when many of the current teachers' associations were created[13]. By reading their statutes[14] or looking at their mission statement or

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8 Decree-Law No. 45810 of 9 July 1964. It establishes 6 years of compulsory education.

9 By Decree-Law No. 47480 of 2 January 1967 – as part of a process aimed at bringing the two branches of secondary education increasingly closer – the 1st cycle of secondary education and the preparatory cycle of technical education were unified into a single general cycle, giving rise to the preparatory cycle of secondary education (or simply 'preparatory cycle').

10 Law No. 5/1973 of 25 July – Veiga Simão Reform.

11 The Statute of the Preparatory Cycle of Secondary Education was approved in 1968 pursuant to Decree No. 48572 of 9 September.

12 Although the reform provided for a 4-year preparatory cycle (up to the current 8th grade), of which the 3rd and 4th grades were in trial between 1972-73 and 1974-75, these were not implemented because the reform was interrupted with the transformations of the 25th of April Revolution.

13 In February 1980, the Portuguese Association of Portuguese Teachers (APP); in June of the same year, the Portuguese Association of German Teachers (APPA); in June 1981, the Association of History Teachers (APH); in 1986, the Portuguese Association of French Teachers (APPF); in 1987, the Associations of Teachers of Mathematics (APM), English (APPI), Geography (APG), Philosophy (APF) and Biology and Geology (APPBG); in 1988, the Association of Teachers of Economic and Social Sciences and the Association of Teachers of Latin and Greek and, in 1989, the National Council of Associations of Physical Education Professionals and the Association of Teachers of Visual Expression and Communication. Others were created in the 1990s and subsequent years. We refer here to the dates of legal constitution of the associations mentioned above, even though some of them carried out associative activities before that date.

14 Some teachers' associations have their statutes are available online, e.g., APECV (https://www.apecv.pt/estatutos), APP (https://www.app.pt/sobre-a-app/estatutos/), APH (https://aph.pt/quem-somos/estatutos/), APPBG (http://www.appbg.pt/quem-somos/estatutos), APPELLE (https://appele.pt/estatutos-2/).

their purposes, we can see that the activities of the teachers' associations focus particularly on the subject they represent and mostly on the dissemination/promotion of that subject, teacher education, sharing and collaboration between teachers through congresses, conferences and seminars, the establishment of partnerships and relationships with institutions, namely with the Ministry of Education, particularly in relation to curriculum and assessment issues, and, more rarely, research activities or production of teaching materials. This individual subject-based encapsulation has emerged from a teacher professional culture based on a tradition of individual work and whose dimensions of joint work have been introduced over time associated with prescriptions that have gradually mitigated the traditional individualism, albeit without eliminating the core notion of a teacher's professional identity as an autonomous individual responsible for teaching based on the possession of a specialised body of knowledge in a specific subject to the detriment of pedagogical knowledge and the knowledge of educational sciences.

The social representation of teachers' professional knowledge – with the integration of its components of content knowledge, pedagogical-didactic content knowledge, knowledge of the curriculum, knowledge of the students, and knowledge of the context, as theorised by Lee Shulman (1987)[15], and the lines of analysis of Donald Schön (1983) that envisioned the construction of the professionals' knowledge as a reflection on their practice – was still almost alien to the vision of the 1980s in the Portuguese system, which mostly corresponded to the almost exclusive appreciation of the content or scientific knowledge of the teachers, although the teachers' associations included in their founding texts didactic and sometimes pedagogical objectives. However, their action programmes privileged the scientific dimensions of the specific subject knowledge in most cases.

It was at the level of the education and practices of primary school teachers (current 1st cycle of Basic Education) that pedagogical knowledge and its didactic dimensions (Shulman, 1987) were more appreciated in the social representation of these teachers, possibly because of their association with the age and development of their pupils to the detriment of the appreciation of scientific knowledge. Thus, a duality was maintained in the representation of teaching knowledge in these two specific professional subgroups: unlike the 1st cycle, teaching at the subsequent levels until the end of Secondary Education implied training practices that focused primarily on scientific content knowledge and only very secondarily on some pedagogical content knowledge. However, the representational status places scientific knowledge on a higher plane, referring the main significance of pedagogical knowledge to the initial levels where the learners are young children. This duality, sometimes referred to as *the metaphor of the double funnel* (Roldão, 2004), established and reinforced a difference in terms of the recognition granted to these two subgroups of teachers, generating a cultural divide reflected in the TAs to the extent that a large majority of the associations, based on the specificity of given subject knowledge, did not include primary school teachers at the time.

Relating the process of constitution of the associations with the above-mentioned representational rationale of teachers' knowledge, we can see that it highlighted the divide in the representation of these two subgroups of teachers with regard to the value of the knowledge

[15] To which, more recently, Mishra and Koehler (2006) have added technological pedagogical content knowledge (TPACK).

associated with them: the value of *pedagogical knowledge* as central for generalist teachers at a basic level compared to the supremacy of *content knowledge* associated with teachers of subjects at subsequent levels. It is thus understandable that a large majority of teachers' associations initially limited themselves to the 2nd and 3rd cycles of basic education and secondary education, adopting the terminology coined by the Basic Law of 1986. Mathematics and Physical Education were pioneers in including 1st cycle teachers. The successive changes in the design of the distribution of curriculum areas also influenced the contours and geographies of the associative movement.

In Portugal, the acknowledgement of the teachers' associations as valid interlocutors in the curriculum reforms was first formally possible in the process of the 1989-1990 Curriculum Reform (Roberto Carneiro Reform) in the preparation and implementation of the new syllabuses, both as consultants and responding to specific requests made by the Ministry, or even with the integration of individual members of the associations in teams of syllabus authors.

The same way of associating these organisations to the design of curriculum proposals was maintained in the launching of the Flexible Curriculum Management (1996-2001). At the time, these organisations were similarly associated with the design of curriculum proposals, playing an even more important role. Representatives of the teachers' associations integrated, along with university experts and ministry officials, an Advisory Board that accompanied the production of a document entitled *National Curriculum for Basic Education* in 2001, and the teams of authors of each subject formally included some elements designated by the TAs. The different versions that supported the curriculum design established in 2001 (Decree-law No. 18/1/2001) resulted from many negotiations and some confrontations with the teachers' associations that had greater representativeness by then. Many of these interactions were characterised by a much more noticeable defence of the TAs' views on labour conditions than on their scientific and pedagogical views, namely regarding some resistance in face of the flexibilization of the management of the number of hours per subject.

In 2017, however, the invitation extended by the Portuguese Ministry of Education handed the teachers' associations a measure of power over the formal curriculum unusual not only in the Portuguese curriculum historical context but in most countries, requesting their full and institutionalised participation in the process of defining the EL, with the ME assuming only a relative control over the development of this process regarding the definition and construction of the EL and allowing TAs such a curriculum autonomy as there was no memory in the history of national education policy.

It is therefore important and innovative to study how teachers' associations responded to this invitation and the forms that their participation took, as well as to understand the influence this collegial rationale had over an individualistic professional teaching culture and how this change marked the design of a curriculum aligned by the transversality of the competencies that determine the education path of young Portuguese people.

As mentioned above, the collaboration between associations was not made any easier by the diversity of curriculum documents that had been produced cumulatively over thirty years.

Therefore, a social and historical analysis was undertaken to understand the context of the curriculum references with which the associations were faced.

2.3. Brief history of curriculum frameworks in Portugal

When analysing the reference curriculum documents, which we refer to as references, we should relate the typology of these references to the evolution of the nature and structure of the educational system in its curriculum expression, which evolved from the second half of the 20th century around two main ruptures: consideration of content and methodologies – moving from the prevalence of a strictly scientific and theoretical rationale of the curriculum to the association of a pedagogical-didactic perspective that conveys the knowledge to be acquired through learning; massification and expansion of schooling – moving from uniform curriculum systems for a restricted public to a double decision rationale, both national and local, to face the diversity resulting from the universalisation and expansion of education to the whole population.

2.3.1. Contents and methodologies

Bearing in mind the first rupture, we can distinguish two macro-periods in this evolution. Considering the life of school as an institution, in the period that ran from the mid-19th century to post-war mass education, the reference documents employed in the curriculum practice tended to be unified and markedly prescriptive, limited to the normative assertion of the content to be addressed, thus configuring the classical definition of syllabus. These documents are list-syllabuses, where little or no reference is made to justifications or guidelines for teaching at a time when the expository method of teaching was practically unchallenged, and the pedagogical education of the teachers themselves was practically inexistent or minimalist[16]. Even in the syllabuses for cycles of studies in which some changes started to be introduced in the 1960s-1970s, such as the Preparatory Cycle of Secondary Education (CPES, 1967), this was still the predominant format of a single curriculum reference document for each subject – a syllabus that included the contents (i.e., the topics) that had to be summarised and *accomplished*. This rationale naturally assumed the homogeneity of the students – it was targeted at an average student. In the time span that encompassed this macro-period, in which illiteracy was still very high (close to 30 per cent)[17], the pupils who had access/ascended to levels of education above what was then primary education were relatively few and very socially selected – which meant that no consideration was given to pedagogical and curriculum diversity of sequence, depth or different types of approach to the contents listed in the syllabuses.

[16] The present text refers to the current 2nd and 3rd cycles of Basic Education and Secondary Education that constitute the predominant scope of the teachers' associations involved, referring to the reference matrix inherited from Secondary Education. The education of these teachers at the time was predominantly at the undergraduate level in scientific areas, although there were exceptions in cases of pedagogical experiences and for the small number of teachers who accessed the internships that led to tenure until the expansion of the 1960-1970s. The degree in Pedagogical Sciences taught in the Faculties of Arts and Humanities of the Universities of Lisbon and Coimbra had existed since 1930 and continued after the 1957 reform, but it only became a compulsory requirement for access to the internship in 1970. Decree-law No. 358/70 of 29 July, *Official Gazette* No.175.

[17] In 1960, illiteracy numbers stood at 26.6 per cent of the population over 10 year of age, 39 per cent in the female population; in 1970, the rate dropped to 25.7 per cent, 19.7 per cent in the male population and 31 per cent in the female. (Source: Pordata)

From the 1960-1970s onwards, through the influence of other countries and international bodies and in view of some openness of the Estado Novo regime during the government of Marcello Caetano, some emerging receptivity to slightly different curriculum formats was seen, along with the requirement for some pedagogical education for effective positions at these teaching levels[18], namely the Degree on Pedagogical Sciences after the scientific degrees. In the 1970s, and following the post-graduate education of groups of teachers in foreign universities, namely Anglo-Saxon ones, often encouraged or financed by the Ministry of Education and Higher Education, the first university Departments of Education were created in Portugal. In these, as is the case of the Faculty of Sciences of the University of Lisbon, programs were created with a dual output for the first time – scientific and teaching, after a common core in a particular area or science. This movement towards appreciating pedagogical education also took shape in the new universities – Aveiro, Minho, Évora – which inaugurated models of teacher education shaped by an educational vision and not only scientific and subject-related (Nóvoa, 2008; Roldão, 2014).

The second period of this time span, which continues until today, was therefore marked by the coexistence in the curriculum reference documents of content concerns combined with methodological and pedagogical-didactic guidelines, which have been, as a rule, increasingly incorporated in the introduction and in specific parts of the documents that, however, continue to be called syllabuses. The nomenclature has dragged and reinforced the fixation of the prescriptive model, without generating new areas or levels of curriculum decision and tending to perpetuate the so-called *cover it syndrome*, i.e., the centrality of the notion of *compliance with the syllabuses* (every topic), and included in a training culture that did not even use the concepts of curriculum or curriculum development, later incorporated largely through the influence of people with a Master or a Doctorate degree from Anglo Saxon universities (Felgueiras, 2008; Roldão, 2014).

2.3.2. Massification and expansion of schooling

The second rupture, parallel in time to the second stage of the previous description, which generated curriculum transformations at the decision level, was the shock in the system when faced with the gradual expansion of compulsory schooling and the consequent diversity in terms of learners, from the establishment of the six years of compulsory education[19] – which later, after the Roberto Carneiro Reform (ME, 1989-1990), became nine, and more recently (2012), was extended to the 12th grade. Each increase implied a new variety of types and levels of retention, directly associated with the social, economic, and cultural diversity of the students in the face of an unchanged school system that perpetuated the single curriculum prescription clearly more distant from the cultural standards of the students that came from more disadvantaged populations.

[18] Some pedagogical-didactic dimension expressed in the texts existed in the syllabuses for what was then primary education, insofar as it tended to be universal and exercised by generalist teachers aimed at children at an early stage of their access to formal knowledge..

[19] The compulsory education of 6 years had been established in 1964 (Cf. note 5.) The Veiga Simão Reform foresaw the expansion to 8 years of compulsory education, of which the so-called 3rd and 4th grades were experimental steps. The continuity was interrupted by the 25th April 1974 Revolution and the 6 years of compulsory education were maintained until the 1989-1990 Reform.

This phenomenon was experienced by several Western countries, although with slightly different timings, and generated a set of policies that established and recommend that two levels of curriculum decision exist – the *central/national* level, called National Curriculum, particularly in Anglo-Saxon and Nordic countries with a localist tradition and associated with the guaranteed learning of a *common core curriculum* necessary for all, and the *local or institutional* level that left room for decision and adaptation of the curriculum to the contexts at the hands of schools and teachers. This trend, which Roldão (2000) calls the *curriculum binomial*, is seen in all the Portuguese curriculum policies since the 1990s, associated with terms such as *flexibility* and *autonomy*, reflecting an issue that seems unavoidable in a universal education system: the harmonisation of a core curriculum shared by every student, and varied fields of knowledge and learning modes, related to the contexts and cultures of the different contextual situations of schools and students.

In this framework, the concept of *competence* assumes a renewed relevance and a new meaning in international policy and curriculum guidance documents, particularly in those that have been produced by the different education systems since the 1990s, insofar as it allows focusing curriculum acquisitions on a core set of competencies – knowledge-in-use or knowledge-in-action (Perrenoud, 1999; Zakhartchouk & Hatem, 2009) – whose achievement results from the convergence of the different subjects and areas of the curriculum pathways, both transversally and in the subject knowledge itself. It corresponds to a recognition of the uselessness/impossibility of common encyclopaedic curricula in favour of a judicious selection of what is truly essential and the differentiation of the curriculum according to the various situations and contexts. The *National Curricula* (1st versions) of the United Kingdom (Department for Education, Government UK, 1988) and Nordic countries in the 1990s (Ministry of Education and Research, 1994; FNBE, Ministry of Education, 1994)[20], and the Socle de Compétences (2004) developed in the French system at the same time, whose most recent version came into force in 2016, have originated from this matrix. The *National Curriculum for Basic Education – Essential Competencies* established in Portugal (2001) also stemmed from this curriculum movement[21].

2.3.3. The multiplicity and asynchrony of curriculum reference documents in Portugal – a particular case of a difficult reform

The effort made to achieve two harmonised levels of curriculum decision-making has not been easy to implement in countries with very centralist curriculum traditions, especially in Southern Europe, where professional cultures are rooted in generations of teachers who are strongly influenced by the need to 'comply with the syllabus' as opposed to *guaranteed learning*, a terminology more associated with curriculum theory (Tanner & Tanner, 1980).

[20] The National Core Curriculum for Basic Education was renewed in 1985, 1994, 2004, and 2014 – Finish National Board of Education, FNBE, 2016.

[21] England's National Curriculum was introduced by the Education Reform Act of 1988. Similarly to those of Finland and Norway, it has been updated to the more recent versions that are currently in place or are going to be implemented soon, as in the case of Norway. These countries also provide several support documents for schools, teachers, and homeschooling. https://www.gov.uk/government/collections/national-curriculum.

Such persistence of very uniform curriculum prescriptions has contributed to the maintenance or worsening of retention levels, which has generated, in turn, numerous support programmes to promote success since the 1980s – e.g., the TEIP Programme[22] started in 1996 and is still in effect in schools designated as priority intervention schools.

Thus, in the Portuguese case, both the construction and the application of the curriculum reference documents aimed at fostering competencies have not been easy to implement and were quickly transformed in the school context into 'syllabuses' under a different name. The same holds true in the opposite end of the curriculum binomial – e.g., school and class *curriculum projects* (Decree-law No. 6/2001 of 18 January) were clearly aimed at providing schools with some autonomous curriculum decision power, but most schools did not comply with this request: schools and teachers alike, long used to having little autonomy, saw this demand in a prescriptive sense once again (Roldão & Almeida, 2018).

Considering curriculum reference documents, the Portuguese situation is thus understandably complex. The product of a system based on monolithic and uniform references until the 1960s and 1970s, the system modified curriculum documents towards their modernisation from 1974 onwards and started by giving rise to new varied syllabuses, investing in their innovative character and adaptation to each subject. These syllabuses were successively created over the years until the 1989-1990 Curriculum Reform[23] systemised and harmonised these documents, creating a coherent structure for all curriculum documents – still called syllabuses, but designed following common curriculum purposes – integrating processes and attitudes with a transversal structure knowledge, and also creating a curriculum autonomy area for schools to adjust to local contexts, the so-called 'School Area'[24]. However, it maintained the rationale of unity of the core curriculum prescription, which would start to be questioned with the progressive expansion of education for all and the growing difficulties in responding to more and more students from different backgrounds and cultures.

Thus, after this last moment of coherent reformist unity – the 1989-1990 Reform – the following decade was characterised by (i) the attempt to introduce and reinforce two levels of curriculum decision, expressed in the *National Curriculum (2001)*[25] centred on essential competencies, and the 'mandatory' opening to school curriculum projects geared towards school autonomy (Decree-law No. 6/2001) and, on the other hand, (ii) the obvious difficulty of schools and teachers to adapt to this new rationale, the production of curriculum guidelines that would hopefully

[22] TEIP- Territórios Educativos de Intervenção Prioritária [educational territories for priority intervention], a positive discrimination programme initiated in the 1990s and currently on its fourth stage. Order 147-B/ME/96 of 1 August.

[23] Decree-Law No. 286/89 of 29 August. Implementation of the Roberto Carneiro Curriculum Reform.

[24] The 'School Area' was a space for interdisciplinary work, managed by form teachers in order to work together on intervention or study projects. It generated great resistance among teachers due to the absence of specific guidelines, although many schools developed interesting projects. A lot of research on this dimension can be found in the archives of the Institute for Educational Innovation (IIE) now integrated in the Directorate General for Education.

[25] The designation 'National Curriculum' is inappropriate for countries with centralist administrations, such as Portugal, where the curricula were always only national, which has made its appropriation by the educational actors difficult. It was, however, adopted to harmonise with the common designation of the other European countries. This document, whose revision was expected in three years, was revoked in 2012 – while the National Curricula of other countries were being revised and remain in place.

clarify for teachers the understanding of the meaning of EL to achieve as a *common core*, which was embodied in two documents, from different dates and with different guidelines, which we briefly characterise below – *Learning Outcomes* (2010) and *Curriculum Outcomes* (2012).

Nevertheless, some of the 1989-1990 syllabuses have remained in place, but in several subject areas, there were initiatives to change the syllabuses by subject, usually shared with the respective associations, as was the case of Portuguese and Mathematics, among others. In other cases, there were only partial adjustments to the initial syllabus, still inspired by the 2001 version of the National Curriculum. At the same time, in the 1st cycle of studies (Primary), for example, the Environmental Studies syllabus is still based on the 1989-1990 curriculum, while Portuguese and Mathematics syllabuses have been changed more than once in the last thirty years. These diachronic changes have moved away from the unifying idea of the curriculum that had been one of the great gains of the overall curriculum corpus produced in the 1989-1990 Reform, and thus there has been no combined reform of the curriculum as a whole – an operation that would be gargantuan, although perhaps necessary, but made difficult by the need to comply with the new double decision requirement: articulating the common national standards with the local standards, different in each context, and corresponding in a more up-to-date fashion to the influences of international syllabuses, namely those of the EC and the OECD, in which Portugal played an active role[26].

Thus, the situation of the reference curriculum documents in Portugal has become a mosaic that has lost its unity in the three decades since the Roberto Carneiro Reform, although it has certainly gained improvements in several subjects individually.

The attempts at curriculum reorganisation materialised in 1999-2001 in the already mentioned flexibility policy associated with the National Curriculum of 2001 and the school curriculum projects pursuant to Decree-Law No. 6/2001. The attempt to find more support in teachers and schools to such curriculum practices clarifying what is really essential to learn has led, in different political moments, to the production of new reference documents referred to as *Goals*: the first ones were entitled *Metas de aprendizagem (Learning Outcomes)*[27] and were produced in 2009-2010; but in 2012-2013, following changes in the political direction of the ME that also revoked the National Curriculum, a set of documents entitled *Metas curriculares (Curriculum Outcomes)* were written. The publication of the latter corresponded to the elimination of the previous ones, concluded and handed to the new government by the team[28] in charge of designing them in 2011. Although the Learning Outcomes had not been homologated yet, they had already been subject to validation by schools in a pilot study on the ground and adjusted as a result of the data collected in that study.

The new documents, while useful, compounded the increasing lack of clarity of prescription perceived by teachers. None of them replaced or revoked syllabuses, they were supporting documents, but in practice, they became a veritable new prescriptive 'curriculum' benchmark.

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[26] OECD-CERI: International project *The Curriculum Redefined– Teachers and Curriculum Reform in Basic Schooling*, 1994; International project *Schooling for Tomorrow 1995-1996*.

Corresponding to two very different visions, we will briefly summarise their differences (Table 1) to clarify the next stage that corresponds to the current situation at the time we are writing this text.

Table 1. Comparative structure of Learning Outcomes and Curriculum Outcomes.

	LEARNING OUTCOMES 2009-2010 (not published officially by the ME)	CURRICULUM OUTCOMES 2012-2013 (published by the ME)
DESIGN	A supervising team that integrated members from every area and subject was set up and coordinated the work in order to guarantee the harmonisation of the transversal curriculum dimensions. This team had autonomy and presented the output to the ME at the end. The subject teams were composed of university experts and schoolteachers; they worked autonomously but complying with the principles discussed by the general curriculum coordination team. The products of each team's work were discussed by the extended team every two months. The curriculum rationale prevailed, but the harmonised subject rationale was integrated into it.	Teams of different subjects were formed under the direct guidance of the ME. There was no curriculum rationale that brought together these teams. An essentially subject rationale was favoured. It responded to a request made by the ME to the schools. There was no supervising team. School teachers and some university experts from different subjects participated in each team. The subject approach prevailed.
APPROPRIATION BY SCHOOLS	Work was carried out with schools and teachers to validate, improve and assess the usefulness of the first versions produced, which then formed part of the final version.	
FORMULATION	Formulated integrating observable and mobilizable results (referring to competencies, knowledge-in-use) and development processes, designed for the end of each cycle, establishing intermediate steps of achievement to be managed differently by schools.	Operative formulation, translated into observable outcomes quantified where possible. Organisation of these results by school year as a defining prescription of pass/fail per year.
PROPOSED USE	Not mandatory. Support for joint work with teachers from school departments and class councils in the light of the other curriculum documents. It aimed to clarify the existing syllabuses in an operative manner, not to replace them, but to make them easier to read.	Mandatory. Clear orientation towards the results to be achieved. It has had much impact on the production of textbooks, shaping for schools the pragmatic version of the syllabuses.

Source: Prepared by the authors.

[27] The Learning Outcomes were included in the curriculum continuity of the 2001 documents. According to the text of the ME, 'The "Learning Outcomes" project is part of the Comprehensive Strategy of National Curriculum Development outlined by the Ministry of Education in December 2009. It consists in the design of curriculum management references for each subject or subject area, in each cycle of studies, developed in its sequence by years of education, also including final goals for pre-school education. These references are subject to adjustment within the autonomy of each school or groups of schools. They translate into the identification of the competencies and performances expected from students, on the understanding that such competencies and performances show the effective achievement of learning in each area or subject and also the transversal learning recommended in the curriculum reference documents (National Curriculum or Curriculum Guidelines for Pre-School, and Syllabus or Syllabus Guidelines of the Subject or Subject Area). The Learning Outcomes are, therefore, instruments to support curriculum management, and are made available to be freely and voluntarily used by teachers in their daily work. As they are not normative documents, their effective use is intended to result from the recognition of their practical usefulness by teachers, students, and families. The project foresees its development in four stages until 2013.' http://metasdeaprendizagem.dge.mec.pt/metasdeaprendizagem.dge.mec.pt/index.html

[28] Its operationalisation was the object of a contract signed between the Ministry of Education through the Directorate General for Innovation and Curriculum Development (DGIDC) and the Institute of Education of the University of Lisbon. Under this contract, a core team was formed, coordinated by Natércio Afonso, in charge of the design, organisation, and coordination of the project. The coordination team consisted of Natércio Afonso (Coordinator), Alexandra Marques, Cecília Galvão, Isabel Lopes da Silva, Maria do Céu Roldão, Maria Helena Peralta, and Teresa Leite (Cf DGIDC, http://metasdeaprendizagem.dge.mec.pt/metasdeaprendizagem.dge.mec.pt/index.html)

Although the *Learning Outcomes* (2009-2010) were never homologated, and the *Curriculum Outcomes* (2012) were (at least in part), the knowledge of both added another layer of imprecision in schools, aggravating the lack of clarity due to an array of documents that overlapped, in many cases without revocation of the previous ones, and largely by the dominant culture of compliance with the prescribed versus co-construction and reconceptualization.

2.3.4. The 2018 reconfiguration – Decree-Law No. 55/2018 of 6 July and Decree-Law No. 54/2018 of 6 July

What was the situation then at the time the 2016-18 curriculum redesign process took place regarding the role played by teachers' associations? Essentially, it is important to understand that it was a step towards generating, once again, curriculum harmonisation and coherence without undertaking a complete reconstruction of the numerous existing documents.

Following the difficulties described above, in which successive governments implemented more and more guidelines in order to clarify what was really important to learn, and following lines that varied with the curriculum orientation – *Learning Outcomes* (2010) and *Curriculum Outcomes* (2012) – a new attempt was made in 2016-2017 to stabilise this dual relationship between the essential and the diversifiable, originating, as pointed out, in the effects of school massification and aiming to improve success.

> This path has been translated into two fundamental steps:
> **1.** The previous definition, discussed among social and educational actors and submitted to public consultation, of a students' profile competencies (*Students' Profile by the End of Compulsory Schooling* – 2017), guiding the entirety of the curriculum documents.
> **2.** The reconfiguration of a curriculum reference matrix based on a common conceptual structure and combining the multiple previous references (Syllabuses, National Curriculum, Goals, etc.) – synthesizing the EL (2018-2019) of the subjects and subject areas, combined with the competencies inscribed in the PS. The aim was to seek a re-signified construction of the various existing documents, establishing the basis for the possible redrafting of a true curriculum reference that, in time, could gradually dispense with the accumulation of pre-existing documents.

This time the participation of the TAs was expressly requested as authors, with support from consultants invited by the TAs and curriculum experts appointed by the ME, aiming to establish an aggregating curriculum benchmark that would focus on (a) the achievement of final competencies and (b) ensuring the combined path of common EL and curriculum choices made by schools, which could best contribute to achieving this comprehensive purpose expressed in the SP.

Therefore, it was not easy for the TAs to manage this challenge in which they were involved, in the presence of multiple curriculum reference documents – a complex process that, although starting from coherent curriculum assumptions, included several problematic areas in the very development of the process and in the assessment of the available curriculum knowledge. It is the voice of the TAs that constitutes the object of study in this text.

3. Methodology

Social Network Analysis (SNA) is a theory that supports a methodology for the graphical and quantitative formalisation (statistics for quantitative network analysis) of concepts abstracted from social reality processes. The advantage of the SNA is its focus on the relational aspect of the data collected (Wasserman & Faust, 1994).

The concept of a social network refers to a structure of links between actors, organisations or social institutions in a given social system. The links may consist of kinship, friendship, professional relationships, commercial exchanges, or any other foundation that forms the basis of a relationship. Network analysis considers social reality as a structure of relationships involving interdependent entities (groups, individuals, organisations, etc.).

The basic principle of network analysis is that the structure of a social relationship determines the content of that relationship. It seeks to detect patterns of interaction and explain why they occur and what their consequences are. Thus, network analysis (Fialho, 2014; Wasserman & Faust, 1994) assumes a rationale of structural analysis based on two core aims (1) identifying certain patterns of social interaction and (2) understanding the influence of these patterns on the behaviour of social actors. The main relationship patterns that can be traced in a social network with reference to the position of the actors in that network are the following (Cross & Parker, 2004):

- *central connectors* or *hubs*, actors who have a high number of relationships in the network;
- *boundary spanners*, actors that connect the subgroups (cliques or small groups) of a network acting as an interface between these subgroups, i.e., they can facilitate critical links between two subgroups, thus avoiding the isolation of these subgroups;
- *information brokers*, actors who are closer, even if indirectly, to every member of the network and are the shortest path between two people for most network actors. These actors have a great influence on the flow of information in the network; they are called on to start the dissemination of information or increase connectivity in the network;
- *peripheral people*, individuals who have few or no connections within the network.

The type of graph used to represent social networks is called a 'sociogram.' In a sociogram, the *nodes* are equivalent to the actors, and the segments of lines correspond to the links or *ties* (Wasserman & Faust, 1994; Scott, 2000). The network is understood as a set of nodes connected by links or edges that constitute a *set of* actors. These links are classified as (i) *undirected ties* – lines without arrows showing directionality between pairs of nodes or (ii) *directed ties* – they indicate that the connections show the direction from one node to another (the arrow at the end of each line segment indicates the direction of each connection, i.e., if it is bidirectional or not). Links can express a numerical value that discloses the strength (frequency) of the connections between nodes.

Thus, SNA as a theory and methodology meets the objectives of the present study: to understand the dynamics of interaction between teachers' associations during the collaborative process of drafting EL for basic and secondary education, as well as the activities performed and the outputs produced during that process.

The literature suggests that in the social analysis of networks in closed groups (Borgatti & Molina, 2005; Cross & Parker, 2004), as is the case in this study, in which the groups are the teams made up of the various TAs, one should start by delimiting the group to be analysed so that subsequently one can collect from each of the elements that make up the teams their type and degree of relationship with each other. The strategy for gathering information on the members of the associations' teams consisted of emailing each association to ask them to complete an Excel spreadsheet with the identification (names or their replacement by numbers) of the coordinators, team members and consultants, as well as the identification of the area of speciality for which they were invited to join the team, their qualifications, institution of professional affiliation and information on whether they belonged to the association.

The objectives and research questions of this study, together with the identification data collected, underpinned the construction of a network analysis questionnaire. The questions were designed around the constitution of the teams of the associations to gauge the relationship of the group as a whole and the role of each individual within this group, as well as the interaction with other associations. The questionnaire was made up of open and closed questions and was structured into six parts: (i) composition of the team; (ii) interaction within team members; (iii) interaction between teams of associations in the same subject area; (iv) activities conducted; (v) working tools used to conduct those activities; (vi) outputs produced by the association. The last three parts comprised questions based on the work sessions carried out and outputs produced individually by the associations and based on their interaction with the other associations in the same subject area.

The survey was sent by e-mail for the eighteen associations. The answers were subsequently elaborated based on eighteen focus groups with the elements of the teams of the eighteen associations. The focus groups[29] were comprised of six or five elements, whose selection was made by the TAs on condition that each group included, at least, the coordinator of the team and other elements[30] that had participated in the drafting of the EL by school year and by subject, thus ensuring the diversity of the participants[31]. The reliability of the results obtained through the focus group technique was guaranteed by (i) the constitution of small groups (Morgan, 1996) and (ii) the participation of two researchers, one taking notes and the other acting as a moderator (Morgan, 1997).

The graphical representation of the relationship patterns within the teams of the respective associations was drawn using Gephi 0.9.2. The data collected from the eighteen questionnaires

[29] The focus groups also had the purpose of building a model on the skills and knowledge needed by teachers for curriculum design at the macro-level, which resulted in an article that was published.

[30] In three cases, the number of participants was lower due to the unavailability of some elements of the associations' teams.

[31] The ME granted full autonomy to the associations to build their teams. In every association, most of their team members either belonged to the board of directors or were associates. According to the associations, the criteria for choosing their team members were based on proximity, scientific and pedagogical affinity. Consequently, the positions taken by the members of the teams were very consensual, hence the only requirement of the researchers in the selection of the members for the focus group: the presence of the coordinator and of members who had participated in the various EL assigned to each association (by school year or by subject).

were processed using Microsoft Excel in a square matrix that was later transformed into two different databases so that the data could be imported into Gephi: (i) one for the identification of the nodes (with the roles of the elements in the team – coordinator, team members, consultant, and mediator), and (ii) another one for the identification of the edges (of the links, directions of the links, and their frequencies).

To ensure data confidentiality and anonymity, each association is represented by a letter and each team member by the respective letter of the association and a number. The relational dynamics of the associations were represented in graphs according to the related areas, defining four thematic areas: Languages, Social Sciences, Sciences and Technologies, and Expressions (identified randomly by letters A to D).

The attributes of the actors referring to their functions in the associations' teams are represented by geometric figures, for which the polygon plugin provided by the online Gephi support platform was installed. The attributes referring to the actors' areas of training or expertise are represented by a colour scheme developed by the authors and available on the Data Table tab, Appearance option.

The initial graphs drawn by Gephi are created randomly, positioning the nodes without any apparent logic. However, to facilitate the analysis, we can use some Gephi features that change the position of the nodes and also enable a more comprehensive presentation of the graphs.

Thus, for the representation of the three graphs, we chose Force Atlas distribution from the Layout tab that 'makes graphs more compact.' We also selected the Attraction Distribution option from Force Atlas to show the 'authorities in a more central position than the hubs.'[32] For the graphs of the networks A+B and D, the default values of the Force Atlas distribution were kept; but for the graph of network C, the default values were changed to improve the visualisation of the network using the options Repulsion strength (set from 200 to 50) and Maximum displacement (set from 10 to 5). This change in values derives from the fact that it is a smaller network when compared to the others, and therefore these changes make the visualisation of images even more compact.

The centrality of the three graphs was normalised at [0,1] to calculate the distance measures (diameter, radius, and average path length of the edges), which allowed us to view graphs more clearly. Otherwise, the lines would become too thick due to the numerous interactions and make the graphs unreadable. To calculate the centrality and the density of the networks, the direction of the edges was not taken into account because the relations were mostly bidirectional. The direction implies the existence of arrows at the edges of the edges (links) that can also make the graph less legible.

Table 2 describes the statistics from Gephi that are more appropriate for the analysis of the networks formed by the TAs.

[32] Information contained in Gephi 0.9.2.

Table 2. Gephi statistics used to analyse the networks formed.

STATISTICS	DESCRIPTION
Average network degree	The average number of edges connected to a node.
Network diameter	The shortest distance between the two most distant nodes of the network: it represents the linear size of the network.
Average path length	The average graph distance between pairs of nodes.
Graph density	The number of edges divided by the maximum possible edges. It shows how close the network is to being complete or comprising all possible connections.
Clustering coefficient	A measure of the degree to which nodes in a graph tend to cluster together.
Connected components	The number of components in the graph.

Source: Prepared by the authors, adapted from Gephi 0.9.2.

4. Results

4.1. Characterisation of the teams formed by the teachers' associations

In the preparation of the EL, as shown in Table 3, the eighteen TAs brought together 129 members in their teams with 86 consultants in a total of 215 members (nodes), with 1549 relations between them (edges). Generally, the associations invited consultants to their teams, with the exception of six TAs that chose not to use this resource (see Figures 1, 2, 3, and 4). In two of the associations' subject areas (C and D), it was necessary to resort to a mediator to ensure the process of interaction around the drafting of the EL.

Table 3. Number of members of TA teams by subject area and edges.

ASSOCIATIONS BY SUBJECT AREA	No. TEAM MEMBERS	No. CONSULTANTS	MEDIATOR	TOTAL MEMBERS	No. EDGES
Subject area A	37	17	0	54	508
Subject area B	30	21	0	51	293
Subject area C	28	25	1	54	515
Subject area D	34	23	1	57	232
TOTAL	129	86	2	215	1 548

Source: Network analysis questionnaire prepared by the authors.

Regarding institutional affiliations, we can see from Table 4 that the associations have formed teams made up overwhelmingly of their board members and associates (121) as only seven elements do not belong to the associations. Among the members of the associations, the majority are primary and secondary school teachers (90), and the rest are mainly affiliated with higher education institutions.

The consultants invited by the associations are mainly affiliated with higher education institutions, and more are from universities than polytechnics.

Table 4. Number of team members of the associations and their consultants by institutional affiliation.

INSTITUTONAL AFFILIATIONS	No. ELEMENTS THAT BELONG TO THE ASSOCIATION	No. ELEMENTS THAT DO NOT BELONG TO THE ASSOCIATION	No. CONSULTANTS
School of Basic and/or Secondary Education	90	7	19
Higher Education (not specified by the TAs)	11	–	4
NOVA University of Lisbon	2	–	11
University of Lisbon	7	–	17
University of Porto	1	–	8
University of Minho	1	–	4
University of Coimbra	–	–	9
Polytechnic Institute of Porto	1	1	1
Polytechnic Institute of Lisbon	–	–	1
Polytechnic Institute of Viseu	1	–	–
Polytechnic Institute of Santarém	–	–	1
Aberta University	1	–	–
Lusíada University	1	–	–
University of Aveiro	–	–	–
Catholic University of Porto	–	–	–
João de Deus Higher School of Education	1	–	–
Embassy	1	–	–
Institute for Educational Evaluation (IAVE)	1	–	–
Language Institute	–	–	–
Foreign University	1	–	–
Scientific Society	–	–	–
Foreign University	–	–	–
Scientific Association	1	–	2
Pedagogical Teachers' Association	–	–	1
TOTAL	221	8	86

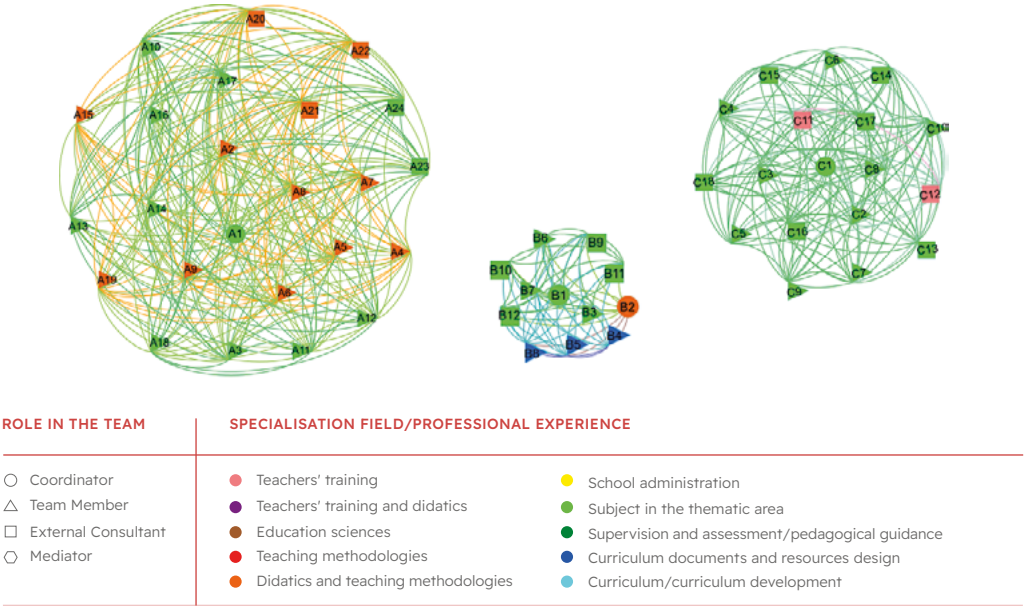
Source: Network analysis questionnaire prepared by the authors.

4.2. Interaction between teachers' associations by subject areas

4.2.1. Interaction between Teachers' Associations by subject area: subject area A

The three TAs in subject area A formed their respective teams (groups A-C), with a total of 54 members (nodes) and 508 interaction relationships established between them (edges) (Figure 2). The members of every team collaborated a great deal with each other.

Figure 2. Representation of the relational dynamics of teachers' associations in subject area A.



Source: Prepared by the authors using Gephi 0.9.2.

The three teams formed by the three associations are made up of members whose training is mainly in the subject area, followed by teaching methodologies. Team B also has elements with professional experience in curriculum documents and resources design[33], and Team C in the area of teachers' training.

In terms of links, we can see that associations A, B, and C did not interact beyond the respective members of the team constituted for the elaboration of the EL since no external links to their team can be observed in the graph (Figure 2).

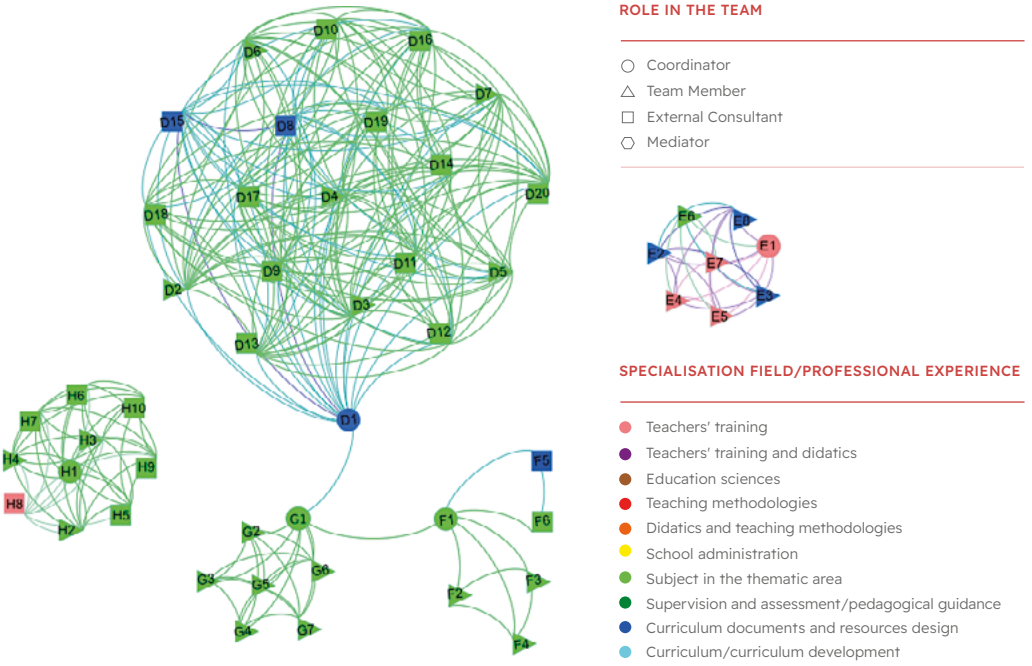
In this graph of subject area A, we can find a trend that will also surface in subsequent graphs: the coordinators play the role of central connectors or hubs in their teams, actors who have a high number of relationships in the network due to the hierarchical position they hold.

4.2.2. Interaction between Teachers' Associations by subject area: subject area B

The five TAs in subject area B formed their respective teams (groups D-H) with a total of 51 members (nodes) and 293 interaction relationships established between them (edges) (Figure 3). The members of TA D were the most collaborative within their team.

[33] Experience in curriculum documents and resources design does not refer to area of specialisation, instead it means that these individuals have experience in curriculum documents and resources authorship, i.e., they were invited by the TAs because they are authors of textbooks, syllabuses and/or other Portuguese curriculum documents.

Figure 3. Representation of the relational dynamics of the teachers' associations in subject area B.



Source: Prepared by the authors using Gephi 0.9.2.

The five teams formed by the five associations were composed of elements whose training is mainly in the thematic area. TA E had some diversity of specialisations: teachers' education, thematic area, and also elements with professional experience in curriculum documents and resources design[34]. This association and TA G are the only ones in this subject area that did not invite consultants to join their team.

Regarding interactions, we can see that associations D, F, and G interacted with each other, but only through their coordinators (D1, G1, and F5). In any case, it was the coordinator of TA G that mediated between the three associations, given that there is no connection (edge) between the coordinator of TA D (D1) and TA F (F1). The remaining team members did not take part in this interaction.

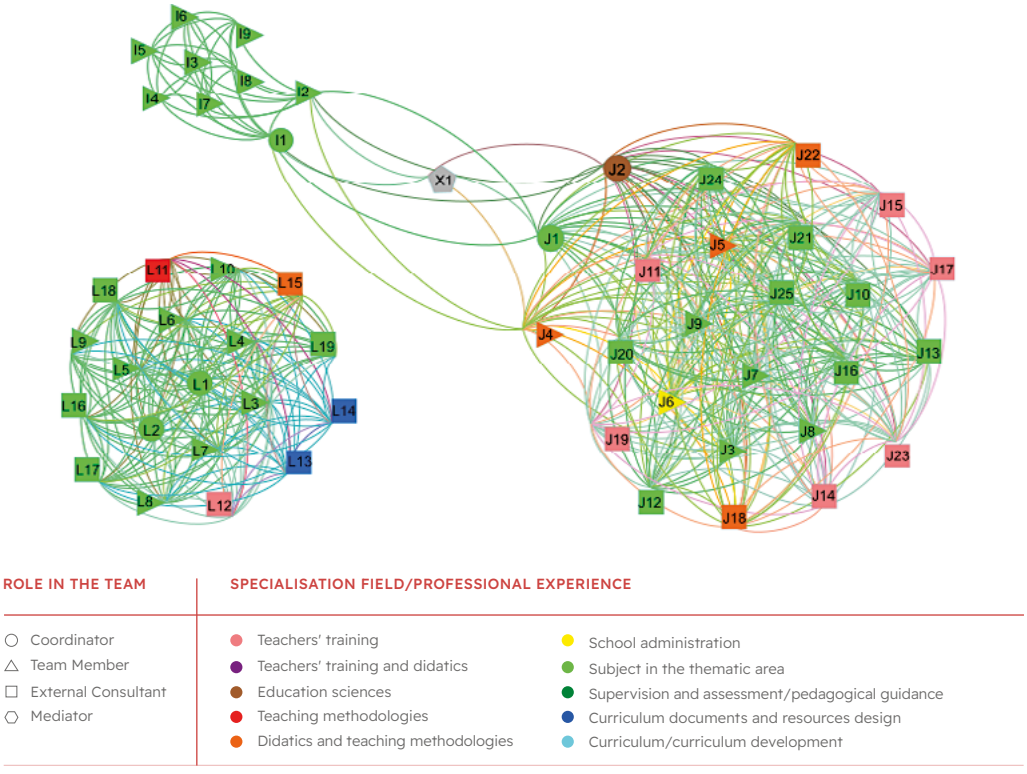
Subject area B illustrates another role played by the associations' coordinators, that of boundary spanners, actors who connect subgroups (cliques or small groups) of a network, playing the role of interface between these subgroups. As we can see in the next associations' subject areas (see Figures 4 and 5), the coordinators are chiefly the elements that establish the link with the other groups/associations.

[34] Experience in curriculum documents and resources design does not refer to area of specialisation, instead it means that these individuals have experience in curriculum documents and resources authorship, i.e., they were invited by the TAs because they are authors of textbooks, syllabuses and/or other Portuguese curriculum documents.

4.2.3. Interaction between Teachers' Associations by subject area: subject area C

The three TAs in subject area C formed their respective teams (groups I-L), aggregating a total of 53 members (nodes) and 515 interaction relations established between them (edges) (Figure 4). The members of associations L and J collaborated a great deal within their teams.

Figure 4. Representation of the relational dynamics of teachers' associations in subject area C.



Source: Prepared by the authors using Gephi 0.9.2.

The three teams formed by the three associations are composed of elements whose education is mainly in the subject area, with TA I standing out since all its team members have this specialisation. The team members of TA L and J have more diversified specialisations, ranging from teachers' education, teaching methodologies, didactics and teaching methodologies, curriculum documents and resources design, school administration, and education sciences. Association I is the only one in this subject area that has not invited consultants to join its team.

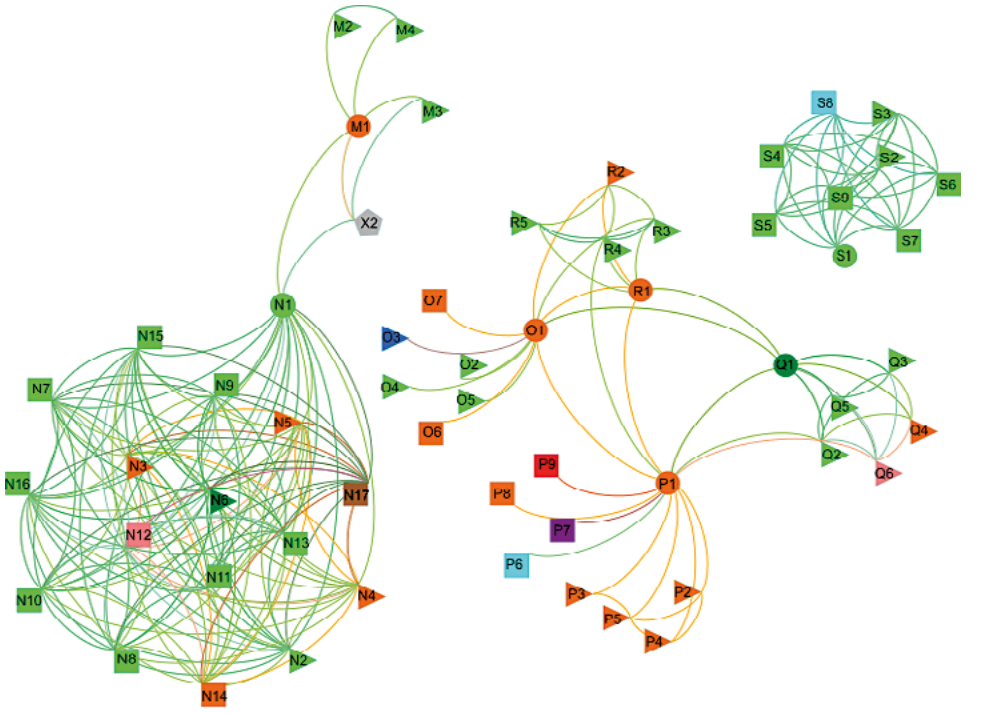
Association L has no links with other associations in the same area. Associations I and J needed a mediating element (X1) from outside their respective teams to interact. This mediation occurred only with some elements of the two teams (J1, J2, and J4 versus I1 and I2). These two associations also interacted without mediation through one of the coordinators of TA J (J1) and an element of its team (J4) with TA I through its coordinator (I1) and an element of its team (I2).

In subject areas C and D (Figure 5), the associations needed to resort to mediators from outside their teams who functioned as boundary spanners, actors who facilitate critical links between two subgroups due to existing conflicts.

4.2.4 Interaction between Teachers' Associations by subject area: subject area D

The seven TAs from subject area C formed the respective teams (N-S groups), aggregating a total of 57 members (nodes) and 232 interaction relationships established between them (edges) (Figure 5). As shown in Figure 4, TA N presents greater dynamism in the interactions within its team.

Figure 5. Representation of the relational dynamics of teachers' associations in subject area D.



ROLE IN THE TEAM	SPECIALISATION FIELD/PROFESSIONAL EXPERIENCE	
○ Coordinator	Teachers' training	School administration
△ Team Member	Teachers' training and didatics	Subject in the thematic area
□ External Consultant	Education sciences	Supervision and assessment/pedagogical guidance
⬡ Mediator	Teaching methodologies	Curriculum documents and resources design
	Didatics and teaching methodologies	Curriculum/curriculum development

Source: Prepared by the authors using Gephi 0.9.2.

With the exception of the other subject areas, there was practically no collaborative work in associations O and P, where each team member only worked with the respective coordinator. In association P, only three elements (P2, P4, and P5) worked together in the preparation of the EL.

In this subject area, most of the members of the associations were also invited because of their specialisation in the subject area (AP N, M, R, Q, S). However, TA P is the only one in this subject area and of the remaining ones not to have any members with training in the subject area and to value above all didactics and teaching methodologies, in addition to having members specialising in three other areas: teaching methodologies, teachers' education and didactics, and curriculum/curriculum development. It should be stressed that only two associations have elements in the team with training in curriculum/curriculum development, and both belong to this subject area D (TAs P and S).

As seen in other subject areas, not all the associations in this group interacted among themselves, and TA S does not present external links with the other associations in the same area. Associations M and N interacted through a mediating element (X2) and also have direct links but only between their coordinators (M1 and N1). Associations O, P, Q, and R have links between their teams mainly through their coordinators (O1, P1, Q1, and R1).

4.3. Synthesis of the interaction between Teachers' Associations by subject area

In short, the collaboration in the preparation of the EL by the teams formed by the TAs, as measured through the interactions identified in the four networks, took place above all within the teams of the various associations. The associations in subject areas C and A worked more intensively within their teams, with more interactions (density = 0.36 and 0.355 respectively) than the others. The connections are also higher in subject area C and A, i.e., the average number of connections (edges) between the nodes of the network (average degree = 19.074 and 18.815 respectively). In any case, the interactions between associations in the same subject area are very weak (Figure 2, 3, 4, and 5), where some associations are mostly connected by their coordinators and four associations dialogued through a mediator. The network analysis carried out shows that these are fragmented networks with isolated connected components (11 connected components). They are called small-world networks, characterised by Watts and Strogatz (1998) as having a high clustering coefficient and short path length between nodes. As we can see in Table 5, the clustering coefficient is very high for all associations by subject area, and team members can reach or be reached by others using few connections for this purpose (average path length).

Table 5. Gephi statistics used to analyse networks A, B, C, and D.

STATISTICS	SUBJECT AREA A	SUBJECT AREA B	SUBJECT AREA C	SUBJECT AREA D
Average network degree	18.815	11.49	19.074	8
Network diameter	1	4	3	3
Average path length	1	2.108	1.528	1.954
Graph density	0.355	0.23	0.36	0.14
Clustering coefficient	1	0.968	0.966	0.878
Connected components	3	3	2	3

Source: Network analysis questionnaire prepared by the authors.

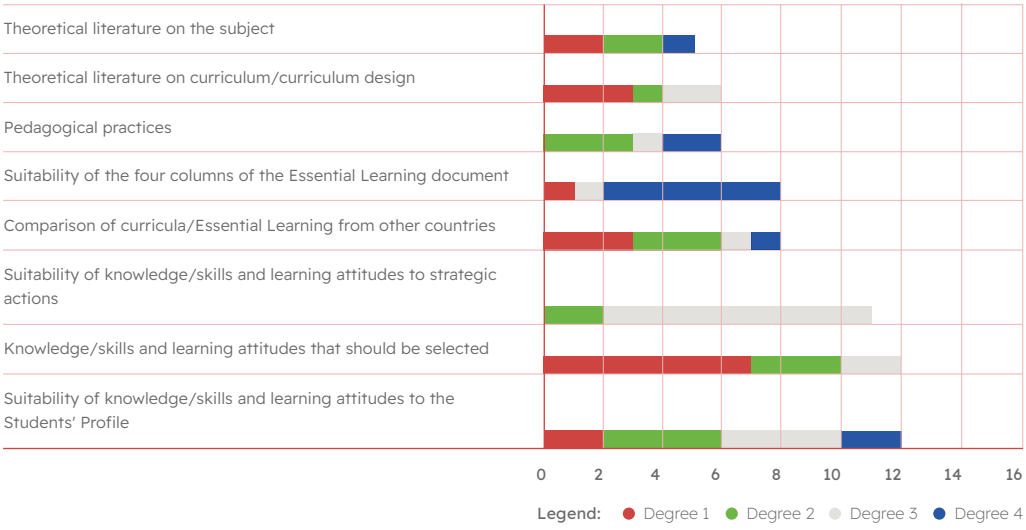
The data show that the teams formed by the TAs to design the EL worked little collaboratively with other associations in the same subject area. These data seem to show that the TAs do not collaborate much with each other, particularly regarding curriculum design.

4.4. Activities carried out by the Associations

Between October 2016 and August 2018, when the EL were completed, the associations drafted and discussed the EL in additional work sessions supplementing the work conducted by the initiative of the ME. We now intend to learn what activities were conducted, the curriculum references that were used, and the outputs that were produced both by the associations individually and in interaction with other associations in the same subject area.

Regarding the activities developed individually by the associations, we presented a set of eight possible activities in the network analysis questionnaire, allowing the respondents to add others and to choose the four most relevant ones by order of importance (from 1 to 4, in descending order of importance). None of the associations added activities. As shown in Figure 6, the most often referenced activities were: (1) Discussion on the *suitability of knowledge/skills* and *learning attitudes* to the SP; (2) Discussion on the k*nowledge/skills and learning attitudes that should be selected*; and (3) Discussion on the *suitability of knowledge/skills and learning attitudes to strategic actions*. Considering the most frequently performed activities, only the activity *Discussion on knowledge/skills and learning attitudes that should be selected* appears with a higher degree of importance (seven of the twelve associations that highlighted it consider it the most relevant activity they conducted). Interestingly, while the third most frequently mentioned activity was the discussion on the *suitability of knowledge/skills* and *learning attitudes to strategic* actions, the activity discussion on *pedagogical practices* was seldomly mentioned.

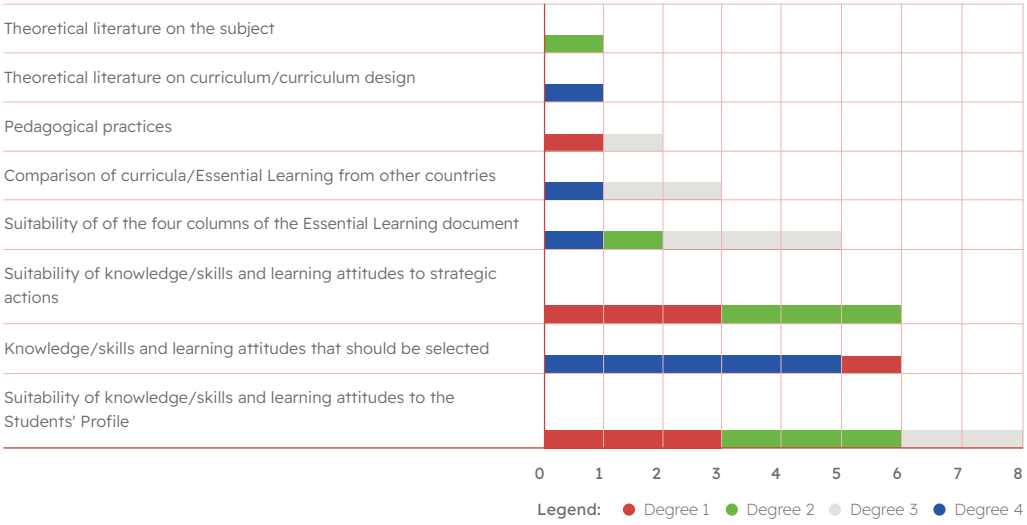
Figure 6. Discussion activities developed by the associations in their teams in the elaboration of the Essential Learning.



Source: Network analysis questionnaire prepared by the authors.

Among the least mentioned activities, besides the discussion on *pedagogical practices*, are the activities of discussion on the *theoretical literature on curriculum/ curriculum design* and discussion on the *theoretical literature on the subject.*

Figure 7. Discussion activities developed between associations of the same subject area in the elaboration of the Essential Learning.



Source: Network analysis questionnaire prepared by the authors.

Regarding the activities developed by the associations that collaborated among themselves, the eight associations that responded (Figure 7) mentioned as the activities most often carried out those that took place within their teams. However, they considered the discussion on the *suitability of knowledge/skills and learning attitudes to strategic actions* and the discussion on the *suitability of knowledge/skills and learning attitudes to the SP* as their highest priorities.

4.5. Curriculum documents used by the associations

When drawing up the EL, the ME suggested that the TAs use the syllabuses in place for the subjects, the SP, the framework document for the EL drawn up by the invited curriculum experts (Roldão, Peralta & Martins, 2017), and international curricula such as those of British Columbia, Canada, New Zealand, and Finland, for example. In addition to these working references, we asked in the questionnaire what other instruments were employed by the a ssociations. As we can see in Table 6, the TAs used a huge variety of curriculum reference documents in the discussion within their teams, among which we highlight the various national curriculum documents prepared over a time span of more than twenty years and with quite different intentions and theoretical references: previous syllabuses of the subjects, Learning Outcomes, Curriculum Outcomes, and the *National Curriculum for Basic Education – Essential Competencies* of 2001.

Table 6. Documents used by individual teachers' associations in developing the Essential Learning.

ASSOCIATION	INSTRUMENTS USED WHEN DRAFTING THE EL
AP 1	Common European Framework of Reference (CEFR); International curricula (USA, British Columbia, Canada, and New Zealand curricula).
AP 2	Curriculum Outcomes; Research of foreign sister associations.
AP 3	Common European Framework of Reference (CEFR).
AP 4	Common European Framework of Reference (CEFR); International curricula.
AP 5	Common European Framework of Reference (CEFR); Theoretical literature on the subject; Didactic literature on the subject.
AP 6	Previous syllabuses; Taxonomic tables; Theoretical literature on the subject.
AP 7	Previous syllabus of 2009; International curricula (British Columbia, Canada); **National Curriculum for Basic Education. Core Competencies**, 2001; Document entitled **A Língua Materna na Educação Básica** [Mother Tongue in Basic Education]. **Core Competencies and Performance Levels**, 1997; Learning Outcomes; Curriculum Outcomes.
AP 8	Theoretical literature on the subject; Didactic literature on the subject; OECD documents.
AP 9	Learning Outcomes; International curricula (British Columbia, Canada, Singapore, UK, and New Zealand); Theoretical literature on the subject; Literature on the didactics of the subject; Documents from international associations/organisations in the subject field; EU and OECD documents: **Agenda 2030 for Education**, OECD.
AP 10	Subject Examination Guidelines. Documents by curriculum experts.
AP 11	Previous subject syllabuses; **National Curriculum for Basic Education. Core Competencies**, 2001; International curricula (New Zealand, England, Canada); Learning Outcomes.
AP 12	International curricula (especially Canada and the UK); Theoretical literature on the subject; OECD and UNESCO documents.
AP 13	**National Curriculum for Basic Education. Core Competencies**, 2001; International Curricula (Canada, New Zealand, and Singapore).
AP 14	Learning Outcomes.
AP 15	Learning Outcomes; International Curricula.
AP 16	Previous syllabuses of the subjects; Theoretical literature on the subject and on specific didactics; Curriculum Outcomes.
AP 17	Curriculum Outcomes.
AP 18	Curriculum Outcomes; OECD Documents; International Curricula.

Source: Network analysis questionnaire prepared by the authors.

Questions on the tools used to collaborate with other associations were hardly answered, which may be a sign of the divergences in relation to the source curriculum documents. The language associations were the exception, as they all used the *Common European Framework of Reference for Languages* (2001).

4.6. Outputs produced by the Associations

The complexity of the elaboration of the EL and the public discussion that the ME wanted to generate around this process and that the associations themselves developed internally is at the origin of the elaboration of outputs beyond the EL.

Table 7 shows that the main outputs produced by the associations were communications at congresses, organisation of meetings, as well as training actions, mainly for their associates. In this regard, one association stands out because it held a massive open online course (MOOC) with the attendance of about 900 teachers.

Table 7 – Outputs produced by the TAs following the preparation of the Essential Learning.

ASSOCIATION	OUTPUTS
AP 1	– Presentations at TA seminars; – Communication in congresses/meetings of the TA; – Training actions for members.
AP 2	– Presentations at TA seminars; – Communication in congresses/meetings of the TA; – Training actions for members; – Training for non-members; – Communication in lectures taught at higher education institutions.
AP 3	– Communication in congresses/meetings of the TA; – Communications in national meetings of institutes of the subject area.
AP 4	– Communication in congresses/meetings of the TA;
AP 5	– Communication in congresses/meetings of the TA; – Results of the consultation with members on the EL; – Training actions for members.
AP 6	– Communication in congresses/meetings of the TA; – Training actions for members.
AP 7	– Communication in congresses/meetings of the TA; – Training actions for members; – Communications in higher education institutions; - Pedagogical days of teachers' organisations
AP 8	– Communication in congresses/meetings of the TA; – Training actions for members.
AP 9	– Presentations at TA seminars; – Communication in congresses/meetings of the TA; – Training actions for members; – Communication in an international seminar and a book chapter.
AP 10	– Communication in congresses/meetings of the TA; – Training actions for members; – Production of lesson plans and activities on EL; – Elaboration of two thematic notebooks with the respective corrections.
AP 11	– Communication in congresses/meetings of the TA; – Training actions for members.
AP 12	– Communication in congresses/meetings of the TA; – Communication at an international congress in the subject area.

ASSOCIATION	OUTPUTS
AP 13	– Communication in congresses/meetings of the TA; – Training actions for members; – Networking and partnerships with similar associations and training centres.
AP 14	– Results of the consultation with members.
AP 15	– Communication in congresses/meetings of the TA; – Training actions for members; – Training for non-members; – Publication of a support dossier with teaching materials.
AP 16	– Communication in congresses/meetings of the TA; – Results of the consultation with members.
AP 17	– Communication in congresses/meetings of the TA; – Workshops for members.
AP 18	– Communication in congresses/meetings of the TA; – Results of consultations with teachers before and after initiating the EL process; – Training actions for teachers and a massive open online course (MOOCs) for 900 people. – Survey of data on the implementation of EL in schools.

Source: Network analysis questionnaire prepared by the authors.

Also noteworthy is the scarcity of pedagogical outputs and surveys on the implementation on the ground at the time of the pedagogical experience carried out in schools in the 2017-2018 academic year.

Conclusion

The participation of teachers' associations in the curriculum design of the EL, a significant element of the current curriculum framework along with the SP, led us to reflect on an apparent conflict between focusing on the content of the subject individuality, of the TAs tradition, and an open curriculum approach, of holistic and transversal perspective, raised by the SP and implicit in the drafting of the EL, of which it is the guiding principle, and whose design would assume a dynamic of sharing and convergence in the alignment of contents and strategic pedagogical actions.

We then set out to study how the TAs, in this case, those that shared some proximity in the scientific area, interacted in the process of creating the EL, seeking to understand whether the interactional dynamics that emerged were characterised by convergence or divergence of actions, whether patterns of social interaction were established, which activities they developed together, how they supported their curriculum action and what outputs resulted from these dynamics during the time they were involved in the curriculum design of the EL. It was also important to know what lessons could be learned from this process that could contribute to the enrichment of teachers' curriculum practices.

The network analysis that methodologically underpinned our study allowed us to understand that the collaboration between the associations in the same subject area occurred on their own

initiative, in addition to the initiatives of the ME, in order to organise the production of the curriculum subject documents, was very weak. Collaboration between some of the associations occurred mainly through interaction between their coordinators, without involving the whole team. No less important was the fact that four associations from two different subject areas used a mediator to ensure interaction. The EL curriculum model, guided by the principle of unity of curriculum meaning and by the transversality of competencies to be developed throughout compulsory education, implied interaction between the associations and not only between the associations of the same subject area, but it came up against the subject compartmentalisation inherent in the very designation and constitution of the TAs in Portugal, reflecting, among other factors, the tradition of individual work by teachers in the Portuguese education system.

From the activities developed by the associations individually and by the eight associations that worked somewhat collaboratively, we can see that there was little discussion about *pedagogical practices*, the *theoretical literature on the subject and on curriculum/curriculum design*, which would imply essential discussions in a curriculum design process and which can be explained in part by the little and late recognition of the teachers' associations as interlocutors in curriculum reforms, whose first formal participation was in the process of the 1989-1990 Curriculum Reform (Roberto Carneiro Reform) and in the implementation of the Flexible Curriculum Management (1996-2001). These participations, although with contributions in the very formulation of syllabuses, were mainly of a consultative nature. In 2016, the invitation extended by the ME to teachers' associations gave them a measure of power over the formal curriculum regarding the definition of EL, allowing a curriculum autonomy such as there was no memory in the history of national education policy. The little discussion about t*heoretical literature on the subject* may mean an agreement on this matter within the associations and among those who managed to collaborate in some way.

The individual TAs used for the preparation of the EL a multiplicity of curriculum reference documents produced cumulatively and asynchronously over thirty years in Portugal, which was also an inhibiting factor for collaboration. It is therefore revealing that in the questionnaire, most associations did not identify the curriculum reference documents that they had used in collaboration with other associations. As mentioned above, the situation of the reference curriculum documents in Portugal has become a mosaic that has lost its unity in the three decades since the Roberto Carneiro Reform. The differences in the identification of the various curriculum references can be explained by the theoretical positions of the associations and also by the fact that some of them had been previously involved in the construction of one reference or another.

Given the complexity of the process of drawing up the EL, which lasted around a year and a half, the TAs engaged in a great deal of internal debate, as can be seen from the network analysis carried out, which culminated in the production of outputs, mainly papers at conferences, and organisation of meetings or training activities. However, we found a scarcity of pedagogical outputs and data on the implementation of EL in schools, which can be in part explained by the traditional work carried out by the associations, less focused on research activities or the production of teaching materials.

We consider relevant the testimony of four of the eighteen associations interviewed in the focus groups, when they state that the dynamics of the meetings promoted by the ME with all the

teachers' associations invited for the elaboration of the EL fostered the beginning of some collaborative work, although that only became clear after the elaboration of the EL:

> The interesting part of the process was that we, with these meetings promoted by the Secretary of State, have created relationships. We currently have a network with A, M, and H. We hold annual meetings, and we will even have a project this year to accompany some schools. This is a very interesting side effect, perhaps even much more so than the process itself. (Focus group 16)

In this sense, this study has shown that the participants acknowledge the importance of working collaboratively and involving teachers at every stage of curriculum development, i.e., not only in its implementation but also in defining the curriculum at the macro-level, especially when the formal (official) curriculum results from policies that aim to develop interdisciplinarity in schools. Also, at the meso- and micro-level, the collaborative involvement of teachers will be stronger the more schools reproduce this type of initiatives and promote the development of the curriculum in a collaborative way and the reflection on curriculum practices. This practice may contribute to do away with teachers' traditional individualism and isolation, as well as to openness to innovation and the improvement of pedagogical practices. This isolation can be more easily breached if interdisciplinarity originates in the active and shared participation of teachers from different areas of knowledge in the construction of the curriculum.

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References

Abrantes, P. (1994). Associações Pedagógicas de Professores. In J. C. Abrantes (org), *A outra face da escola*. Ministério da Educação.

Almeida, S., de. & **Viana**, J. (in press). Teachers as curriculum designers: What knowledge is needed? *The Curriculum Journal*.

Almeida, M. M. (2012). Desenvolvimento profissional dos docentes do ensino superior. *Contributos para a compreensão do desenvolvimento profissional dos docentes que atuam na formação inicial de professores.* [Unpublished doctoral dissertation]. IE-UL.

Alvunger, D., **Soini**, T., **Philippou**, S. & **Priestley**, M. (2021). Conclusions: Patterns and trends in curriculum making in Europe. In: M. Priestley, D. Alvunger, S. Philippou & T. Soini (Eds.), *Curriculum making in Europe: policy and practice within and across diverse contexts* (pp. 273-293). Emerald.

Bas, G. & **Şentürk**, C. (2019). Teachers' Voice: Teacher Participation in Curriculum Development Process. *Inquiry in education, 11*(1), 5.

Bernstein, B. (1971). On the classification and framing of educational knowledge. In M. Young (Ed.), *Knowledge and control* (pp. 47-69). Collier-Macmillan.

Borgatti, S. P. & **Molina**, J. L. (2005). Toward ethical guidelines for network research in Organizations. *Social Networks*, 27(2), 107-117.

Boto, C. (2018). António Nóvoa: uma vida para a educação. *Educação e Pesquisa, 44*, 1-24.

Carl, A. E. (2009). *Teacher empowerment through curriculum development: Theory into practice* (3rd Ed.). Juta and Company.

Conselho da Europa (2001). *Quadro europeu comum de referência para as línguas. Aprendizagem, ensino, avaliação.* Edições Asa.

Cross, R. & **Parker** (2004). *The hidden power of social networks – understanding how work really gets done in organizations.* Harvard Business School Press.

Department for Education, Government UK (2014). *National Curriclum in England*. https://www.gov.uk/government/collections/national-curriculum

Doll, R. C. (1995). *Curriculum improvement: Decision making and process* (9th Ed.). Allyn & Bacon.

Drake, C., **Land**, T. J. & **Tyminski**, A. M. (2014). Using educative curriculum materials to support the development of prospective teachers' knowledge. E*ducational Researcher, 43*, 154–162.

Drew, V., **Priestley**, M. & **Michael**, M. K. (2016, in press). Curriculum Development Through Critical Collaborative Professional Enquiry. *Journal of Professional Capital and Community, 1* (1), 92-106.

Elbaz, F. (1991). Research on teacher's knowledge: the evolution of a discourse, *Journal of Curriculum Studies, 23*(1), 1-19.

Felgueiras, Margarida (2008). A história da educação na relação com os saberes histórico e pedagógico, *Revista Brasileira de Educação, 13*(39), 483-501.

Fialho, J. (2014). Análise de redes sociais: princípios, linguagem e estratégias de ação na gestão do conhecimento. *Perspectivas em Gestão & Conhecimento, 4*, 9-26.

Fullan, M. (2001). *The new meaning of educational change* (3rd Ed.). Teachers College Press.

Handelzalts, A. (2009). *Collaborative Curriculum Design in Teacher Design Teams*. University of Twente.

Hoogveld, A. W. (2003). *The Teacher as Designer of Competency-based Education.* Open University The Netherlands.

Marsh, C. J. & **Willis**, G. (1995). *Curriculum: Alternative approaches, ongoing issues*. Merrill.

Ministère National de l' Éducation (2015). Socle commun de connaissances, de compétences et de culture. https://www.education.gouv.fr/bo/15/Hebdo17/MNE1506516D.htm#socle_commun

Ministério da Educação (2001). Currículo Nacional do Ensino Básico – Competências Essenciais.

Ministério da Educação (2009). Projeto Metas de Aprendizagem – Estratégia Global de Desenvolvimento do Currículo Nacional. http://metasdeaprendizagem.dge.mec.pt/metasdeaprendizagem.dge.mec.pt/index.html

Ministry of Education (1994). Finnish National Core Curriculum.

Ministry of Education (2016). Curriculum in Finland.

Ministry of Education and Research (2019). New Core Curriculum and Subject Renewal.

Mishra, P. & **Koehler**, M. J. (2006). Technological Pedagogical Content Knowledge: A new framework for teacher knowledge. *Teachers College Record, 108*(6) 1017-1054.

Morgan, D. L. (1996). Focus Group. *Annual Review of Sociology, 22*, 129-152.

Morgan, D. L. (1997). *Focus group as qualitative research* (2nd Ed. Vol. 16). Sage University Paper.

Niza, S. (2009). As associações pedagógicas e a construção do conhecimento profissional. In J. Bonito (org.). *Ensino, qualidade e formação de professores* (pp.381-392). Departamento de Pedagogia da Universidade de Évora.

Nóvoa, A. (2008). *A Difusão Mundial da Escola*. Lisboa: EDUCA.

OECD-CERI. *Projecto Schooling for Tomorrow* 1995-1996.

OECD-Organisation for Economic Co-operation and Development (1994). *The curriculum redefined: Schooling for the 21st century*. OECD Publications and Information Centre.

Oliva, P. (2005). *Developing the curriculum* (6 Ed). Pearson Education.

Oloruntegbe, K.O., **Duyilemi**, A.N., **Agbayewa**, J.O., **Oluwatelure**, T.A., **Dele**, A. & **Omoniyi**, M.B.I. (2010). Teachers' involvement, commitment and innovativeness in curriculum development and implementation. *Educational Research, 1*(12), 706–712.

Ornstein, A. C. & **Hunkins**, F. (2009). *Curriculum: Foundations, principles and issues*. Pearson.

Perrenoud, P. (2000). *Novas competências profissionais para ensinar.* Artmed.

Perrenoud, P. (1999). *Pedagogia Diferenciada. Das Intenções à Ação.* Artmed Editora.

Pintassilgo, J. & **Pedro**, L. (2013). *Associativismo docente. In M. F. Rollo (Coord.). Dicionário de História da I República e do Republicanismo* (pp. 320-323). Assembleia da República.

Priestley, M., **Alvunger**, D., **Philippou**, S. & **Soini**, T. (Ed.), (2021). *Curriculum Making in Europe: Policy and Practice Within and Across Diverse Contexts.* Emerald Publishing Limited.

Priestley, M., **Crick**, T. & **Hizli Alkan**, S. (2019). T*he co-construction of a national curriculum: the role of teachers as curriculum policy makers in Wales*. Paper presented at the ECER conference, 5 September 2019, 3-6 September 2019, Hamburg, Germany.

Priestley, M. & **Drew**, V. (2019). Professional Enquiry: an ecological approach to developing teacher agency. In D. Godfrey & C. Brown (Eds), A*n eco-system for research-engaged schools. Reforming education through research* (pp. 154-170). Routledge.

Roldão, M. C. (2000) O currículo escolar da uniformidade à contextualização – campos e níveis de decisão curricular. *Revista de Educação, 9*(1), 81-92.

Roldão, M. C. (2014). Currículo, Didáticas e Formação de professores – a triangulação esquecida? In M. R. Oliveira (org.), *Professor: Formação, Saberes e Problemas* (pp. 91-103). Porto Editora.

Roldão, M. C. & **Almeida**, S. (2018). Contextualização curricular numa rede de escolas portuguesas: promessa ou oportunidade perdida? *Estudos em Avaliação Educacional, 29*(70), 8-46.

Roldão, M. C., **Peralta**, H. & **Martins**, I. (2017). Currículo do Ensino Básico e do Ensino Secundário. Para a construção de Aprendizagens Essenciais baseadas no Perfil dos Alunos. (Documento de trabalho – Escolas do PAFC). https://www.dge.mec.pt/sites/default/files/Curriculo/Projeto_Autonomia_e_Flexibilidade/ae_documento_enquadr ador.pdf

Roldão, M. C. (2004). Professores para quê? Para uma reconceptualização da formação de profissionais de ensino. *Discursos [Em linha]: Perspectivas em Educação, 2*, 95-120.

Scheerens, J. (2010) (Ed.). Teachers' Professional Development. *Europe in international comparison A secondary analysis based on the TALIS dataset*. European Union.

Schön, D. (1983). *The Reflective Practitioner: How Professionals Think in Action.* Temple Smith.

Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57*, 4-14.

Simmie, G. M. (2007). Teacher Design Teams (TDTs) – Building capacity for innovation, learning and curriculum implementation in the continuing professional development of in-career teachers. *Irish Educational Studies, 26*, 163–176.

Tanner, D. & **Tanner**, L. (1980). *Desenvolvimento Curricular – Theory into Practice*. Macmillan.

Tardif, M. (2002). *Saberes docentes e formação professional.* Editora Vozes.

Voogt, J. M., **Pieters**, J. M. & **Handelzalts**, A. (2016). Teacher collaboration in curriculum design teams: effects, mechanisms, and conditions, *Educational Research and Evaluation, 22*, 3-49.

Voogt, J. M., **Westbroek**, H., **Handelzalts**, A., **Walraven**, A., **McKenney**, S., **Pieters**, J. & **De Vries**, B. (2011). Teacher learning in collaborative curriculum design. *Teaching and Teacher Education, 27*, 1235–1244.

Wasserman, S. & **Faust**, K. (1994). *Social network analysis: methods and applications.* Cambridge University Press.

Watts, D. & **Strogatz**, S. (1998). Collective dynamics of 'small-world' networks. *Nature, 393,* 440-442.

Young, J. H. (1989). Teacher interest in curriculum committees: What factors are involved? *Journal of Curriculum Studies, 21*(4), 363-376.

Young, J. H. (1990). Teacher participation in curriculum development: A study of societal and institutional levels. *The Alberta Journal of Educational Research, 36*(2), 141-156.

Zakhartchouk, J. -M. & **Hatem**, R. (Orgs.) (2009). Travail par compétences et socle commun, *Cahiers Pédagogiques – Répères.*

Legislation

Decree law nº 45 810/ 1964, Diário da República, 1.ª Série, 160, 876-877.

Decree law n.º 48.572/1968, Diário do Governo, 1.º Suplemento, 1.ª Série, 213, 1343-1377.

Decree law n.º 286/1989, Diário da República, 1.ª Série, 198, 3638-3644.

Decree law n.º 6/2001, Diário da República, 1.ª Série-A, 15, 258-265.

Decree law n.º 54/2018, Diário da República, 1.ª Série, 129, 2918-2928

Decree law n.º 55/2018, Diário da República, 1.ª Série, 129, 2928-2943.

Order n.º 147-B/ME/1996, Diário da República, 2.ª Série, 177, 10719.

Order n.º 25931/2009, Diário da República, 2.ª Série, 230, 48391-48402.

Order n.º 5306/2012, Diário da República, 2.ª Série, 77, 13952-13953.

Order n.º 5908/2017, Diário da República, 2.ª Série, 128, 13881-13890.

Order n.º 6478/2017, Diário da República, 2.ª Série, 143, 15484-15484.

Order n.º 6944-A/2018, Diário da República, 1.º suplemento, 2.ª Série, 138, 19734-19734.

Order n.º 8476-A/2018, Diário da República, 2.º suplemento, 2.ª Série, 168, 24652-24652.

The construction of Geography Essential Core Curriculum for the 21st century

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ABSTRACT

Several organisations, including the OECD, have been concerned with the creation of an Agenda for Education, in tune with the principles of the Objectives for Sustainable Development (ODS), designated by Agenda 2030. Since school culture is troubled with evaluable and measurable results, it is fundamental to create national and international debates, about the kind of school that we need and want for the 21st century and for our students. The "Curriculum for the 21st century" project, from the Portuguese Ministry of Education, arises in this conceptual agenda, starting by asking schools, teachers and students to evaluate the curriculum that was being implemented, and providing a common profile of students leaving compulsory education (Students' Profile by the End of Compulsory Schooling – SPECS). SPECS and a new core curriculum are two fundamental pillars of the "Curriculum for the 21st century" project, which is expected to enhance literacy, active citizenship and critical thinking in a VUCA world. The Ministry of Education challenged the Association of Geography Teachers to design the Geography Core Curriculum, by setting out what is essential to learn in Geography and the geographic competences for the 12 years of compulsory schooling.

KEYWORDS

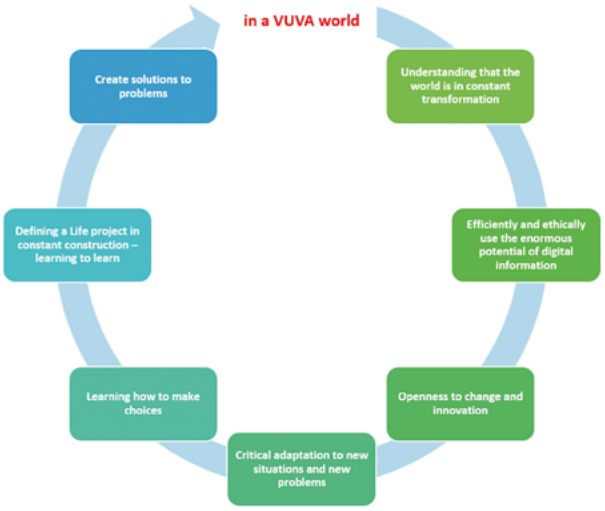
Essential Core Curriculum, Geography, Students' Profile by the End of Compulsory Schooling, Geography Teachers Association.

1. The construction of the Geography Essential Core Curriculum for the 21st century

In a Volatile, Uncertain, Complex and Ambiguous (VUCA) world, it is urgent to think about the role of Geography Education in the provision of conditions that allow students to achieve territory literacy, active citizenship and critical thinking, in a near future.

Since school culture is troubled with evaluable and measurable results, it is fundamental to create national and international debates, about the kind of school that we need and want for the 21st century and for our students.

Figure 1. Geography Essential Core Curriculum in a VUCA world.



In this conceptual context and agenda, the Ministry of Education of Portugal created the project "Curriculum for the 21st century", starting by asking schools, teachers and students to evaluate the curriculum that was being implemented.

It became obvious that the national curriculum needed to be "refreshed", considering that much content determined by the syllabi was obsolete. Teachers were following syllabi published in 1989, 2001, and 2015.

SPECS is expressed in a guiding document that describes the competences that Portuguese students are expected to master by the time they finish compulsory schooling, as well as the vision and values that support this initiative.

The "Curriculum for the 21st century" project is focused on essential learning, grants schools autonomy to manage 25% of the time allocated to school subjects, and encourages multidisciplinary projects. In this context, teacher's associations have been challenged to propose the essential core curriculum of all the subjects in the 12 years of compulsory schooling.

According to the Ministry of Education,

> (...) Essential Learning expresses a triad of elements (knowledge, skills and attitudes) that, throughout the curricular progression, show:
> • what is essential to know (content of structured, conceptually linked, relevant and meaningful subject knowledge);

- the cognitive processes activated to acquire this relevant and meaningful knowledge;
- the know-how associated with the knowledge acquired in a given subject not only in its specific area, but also in the horizontal/vertical links between the knowledge of various subjects. (Eurydice, 2017)

The new core curriculum is focused on essential learning, which is expressed in guidance documents that support planning and evaluation of teaching and learning, leading to the development of competences described in SPECS.

EL is the common curriculum denominator for all students, but does not deplete what a student should do throughout the school year. It is not the minimum to be achieved for the approval of a student, it is the common basis of reference.

Considering that it has been unanimously acknowledged that curricular documents have been too thick in Portugal, we sought to identify, subject by subject, year by year, the essential set of contents, capacities and attitudes, with a view to pursuing the following objectives:

- Consolidate learning effectively;
- Develop skills that require more time (conducting work that entails research, analysis, debate, and reflection);
- Allow for effective pedagogical differentiation in the classroom.

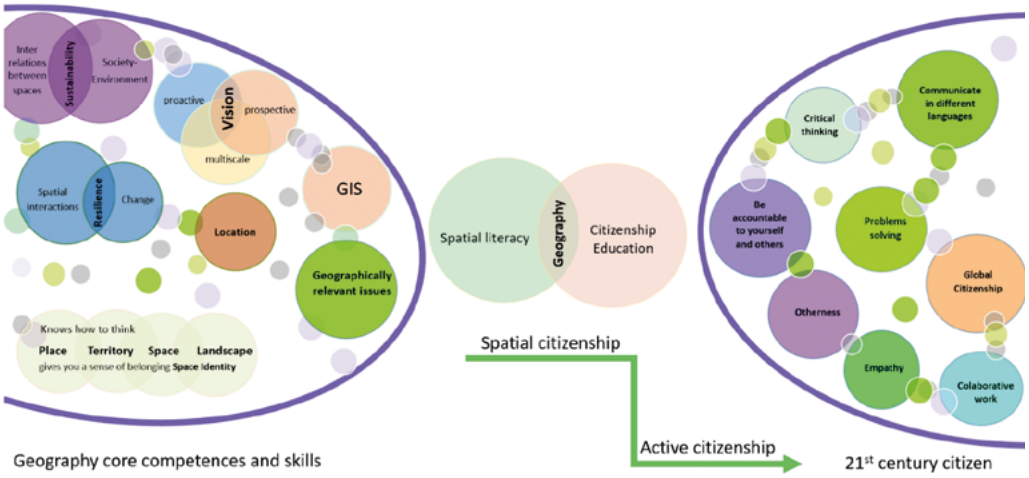
The student's approval will always depend on the learning carried out, resulting from the articulation between the common base of reference and the deepening of other content and themes, which is guided by the areas of competences defined in the PSLCE.

SPECS and the core curriculum are two fundamental pillars that structure the (re)innovation that schools and the youngest need in order to face the 21st century with more competence and critical attitude, thus strengthening citizenship.

It is important to learn Geography to understand complex situations (globalization, climate change, earthquakes, floods and storms, migrations, disparities and conflicts over resources...) that shape much of the aspects of our lives and societies on planet Earth, it requires rigorous scientific knowledge, anchored in key competences.

Students should have capability to delineate strategies, apply and evaluate them, they must be resilient and face problems, they need to solve problems and think about them, along with developing humanistic values to understand themselves and others. They also need to develop active citizenship. Figure 2 represents these ideas.

Figure 2. Geography Essential Learning.



All these aspects lay Geography curriculum on the trilogy of the OECD Learning Compass 2030 – anticipation, action & reflection[1] – and on the four types of knowledge for the future of education (individual and collective well-being): disciplinary, interdisciplinary, epistemic & procedural.[2]

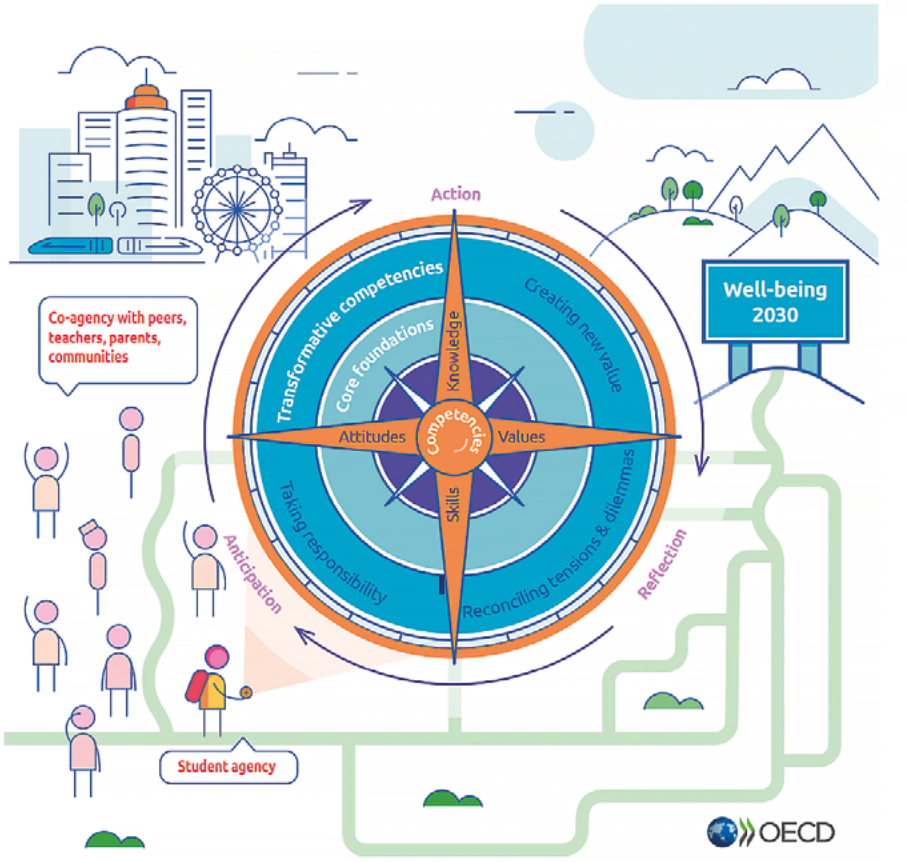
The process of defining the core curriculum of Geography faces tree main challenges:

I. How to adjust the essential knowledge of Geography to global competences and to the needs of the 21st century?
II. How to define the Geography Essential competences without creating a profound rupture with the teaching practice in schools?
III. How to manage essential learning in the context of the Geography curriculum (as a whole) in the 12 years of schooling?

[1] "Anticipation requires more than just asking questions; it involves projecting the consequences and potential impact of doing one thing over another, or of doing nothing at all. Action is a bridge between what learners already know and what they want to bring into being. Through reflection, learners gain a sense of perspective and of power over their future actions, leading to the development of agency." (OECD)

[2] "Disciplinary knowledge, or subject specific knowledge, continues to be an essential foundation for understanding, and a structure through which students can develop other types of knowledge. The opportunity to acquire disciplinary knowledge is also fundamental to equity. Interdisciplinary knowledge can be integrated into curricula: by transferring key concepts, identifying connectedness, through thematic learning; by combining related subjects or creating a new subject; and by supporting project-based learning. Epistemic knowledge involves knowing how to think and act like a practitioner. It shows the relevance and purpose in students' learning and helps deepen their understanding. Procedural knowledge is the understanding of how a task is performed, and how to work and learn through structured processes. It is particularly useful for solving complex problems." (OECD)

Figure 3. The OECD Learning Compass 2030.



Source: OECD (2019).

The Geography Essential Core Curriculum defines fundamental pillars for Geography specific knowledge, thinking and methodology, expressed by a core Geography skills list and its contribution to the achievement of the ideal profile of students when they finish compulsory education, as summarized in Table 1.

Table 1. Contribution of Geographic Education to SPECS.

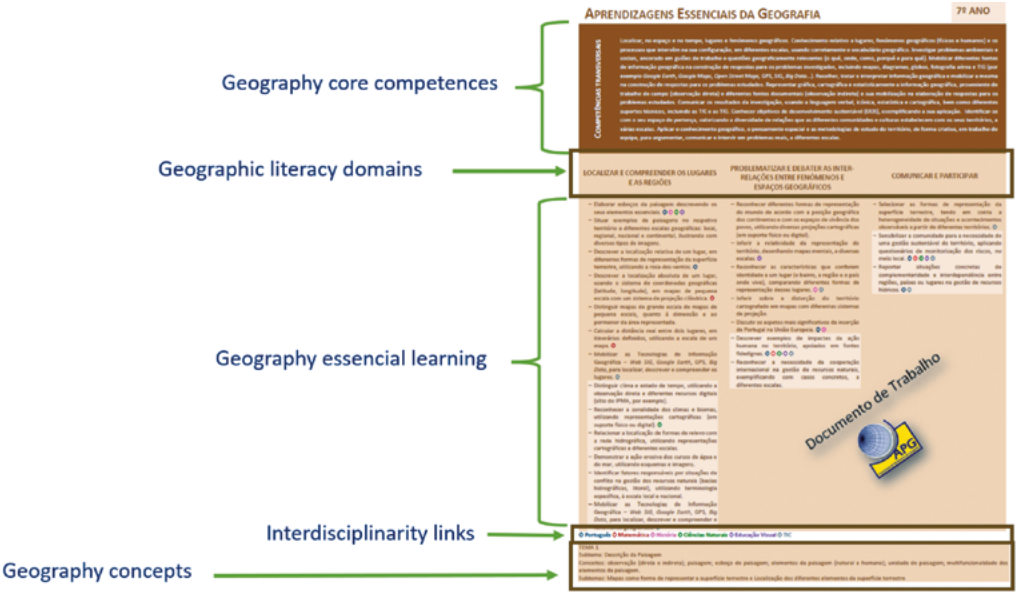
KEY COMPETENCIES/SPECS	CONTRIBUTION OF GEOGRAPHIC EDUCATION (expressed through the core skills outlined in the document that presents the essential core curriculum for geography across the 12 years of schooling)
Languages and texts	Mobilize different sources of geographic information in the construction of answers to the problems investigated, including maps, diagrams, globes, aerial photography and TIG (e.g. Google Earth, Google maps, GPS, IGS).
Information and communication	Collect, treat and interpret geographic information and mobilize it in the construction of answers to the problems studied. Represent graphic, cartographic and statistical geographic information.

KEY COMPETENCIES/SPECS	CONTRIBUTION OF GEOGRAPHIC EDUCATION (expressed through the core skills outlined in the document that presents the essential core curriculum for geography across the 12 years of schooling)
Reasoning and troubleshooting	Represent graphic, cartographic and statistical geographic information, originating from fieldwork (direct observation) and different documentary sources (indirect observation), and mobilize it in finding solutions for problems. Understand the world in its multidimensionality and multi territoriality, in the construction of the identity of the self and others; use examples related to the economic, social and political order nowadays.
Critical thinking and creative thinking	Investigate environmental and social problems, anchored in work scripts and geographically relevant issues (what, where, how, why and for what). Know Sustainable Development Goals (SDG), and exemplify their application. Identify with one's space of belonging, by valuing the diversity of relationships that the different communities and cultures establish with their territories, at various scales.
Interpersonal relationship	Apply geographic knowledge, spatial thinking and methodology for studying the territory, in a creative way, in teamwork, to argue, communicate and intervene in real problems, at different scales; Acknowledge the importance of resilience vis-à-vis change. Find concrete examples of territorial solidarity and sense of belonging, in an SDG perspective.
Autonomy and personal development	Apply geographic knowledge, spatial thinking and methodology for studying the territory, in a creative way, in teamwork, to argue, communicate and intervene in real problems, at different scales; Undertake projects, by identifying problems and raising key issues, with geographical relevance, at the economic, political, cultural and environmental levels, and at different scales.
Wellness and Health	Identify with one's space of belonging, by valuing the diversity of relationships that the different communities and cultures establish with their territories, at various scales.
Esthetical and artistic sensibility	Communicate research results by using verbal, iconic, statistical and cartographic language.
Technical knowledge and technologies	Communicate research results by using different kinds of technical support, including ICT and TIG.
Consciousness and knowledge of the body	Build simple sketches from direct observation of landscape. Apply questionnaires, in fieldwork, to collect data on community opinion regarding the protection, management and/or planning of the territory.

The Geography Essential Core Curriculum was developed by a group of Geography teachers, who have analysed curricular documents from other countries, as well as relevant documents from international organizations, such as the International Geography Union (IGU) and the United Nations (UN), especially with regard to Sustainable Development Goals (SDG).

The documents related to the Geography Essential Core Curriculum present a set of core geographic skills and competences that are essential for the citizen of the 21st century. The student's expected learning is structured vertically in the domains of **comprehension, problematization and communication of geographic phenomena at different scales.**

Figure 4. Layout and structure of the Geography Essential Core Curriculum.



2. Second Cycle of Basic Education (grades 5 and 6) – History and Geography of Portugal

The document was written by an interdisciplinary teachers' team, appointed by the Associations of Geography and History, although this subject – History and Geography of Portugal – is mostly taught by history teachers.The project considered the sequence and organization of content presented in other official documents in the past: syllabi published in 1991 and lists of curricular goals published in 2013.

The project makes connections between geographic and historical contents and competences, which reflects the curricular spirit of this subject, by promoting literacy both in scientific areas and in territorial citizenship.

The document crosses the geographic domains of **location, knowledge of the places and the interrelations and dynamism between spaces** with the competence areas considered in SPECS.

The main themes related to Geography of Portugal in the previous documents were kept, because the second stage of basic education is the only moment when the students systematically study Geography of Portugal, except for those who take Geograpy A as an optional subject in secondary school.

For some of the themes it was necessary to identify the different types of phenomena (localization, description and interrelation of geographic phenomena), by using cartography (analogic or digital), in order to simplify the learning process and turn content more attractive

for students. However, some of the concepts have been removed because they were considered premature for the students' age and out of the pedagogical paradigm that supports the project.

3. Third Cycle of Basic Education (grades 7 to 9) – Geography

The Geography Essential Core Curriculum also considers the sequence and organization of content presented in other official documents in the past: curriculum guidelines published in 2002 and lists of curricular goals published in 2013.

However, some topics were moved from grade 7 to grade 9, because they require a very high level of abstraction.

4. Secondary Education (grades 10 and 11) – Geography A

The themes and sub-themes covered by the previous syllabus were preserved. It is expected that students develop scientific rigor and active citizenship, as they deepen knowledge, understanding and ability to problematize geographic and spatial issues of related to the Portuguese territory.

It was necessary, across all the themes, to remove concepts that were outdated or related to measures of spatial planning in the context of specific European Community programmes (e.g., Total Dependence Index, endogenous and exogenous resources, incidence angle, constant solar, global and terrestrial radiation, solar radiation, direct radiation, POA, POBH, TAB, ERDF, EAGGF, ESF, LEADER, PEDAP, SET-ASIDE, WTO, PER, PRAUD, PROSIURB, STAR, PAR, PRODAC...).

In the 10th grade, particularly, it was also necessary to remove some concepts from "Solar radiation and water resources" because of their degree of complexity.

The "Case Study", from the 11th grade, was preserved, which allows many schools to develop interdisciplinary projects more easily.

5. Secondary Education (grade 12) – Geography C

It was necessary to update and reform the content inherited from the previous syllabus, in order to raise students' awareness of major issues that affect contemporary societies, to develop capacity for understanding places and regions as components of a constantly changing global system, to develop identity and attitudes of territorial solidarity, in a perspective of sustainability. The two first sub-themes were agglutinated, and the sub-themes related to geopolitical and geostrategic antecedents of the second half of the last century were removed.

In Geography C, the most important is to reinforce the geographical perspective in understanding the main issues that affect the world nowadays, such as climate change, Sustainable Development Goals, refugee crisis, the European economic crisis and Brexit.

6. Implementation of the Geography Essential Core Curriculum

The **Geography Essential Core Curriculum** was submitted for critical appreciation by Geography teachers, members of the academy of Geography and Science Education, at different stages of its construction and in several teacher training sessions, wherein the project was introduced in two phases: analysis of the curricular documents, followed by a workshop that interconnected active methodologies with Geography Essential Learning.

The **Geography Essential Core Curriculum** for grades 5, 7 and 10 was tested in 230 schools involved in the Curriculum Flexibility and Autonomy Project, which was submitted to a public consultation period, monitorization and evaluation for one school year.

In August 2018, the **Geography Essential Core Curriculum** was homologated by ministerial order and became the curricular basis for planning and evaluation in schools. It can be accessed online (http://www.dge.mec.pt/aprendizagens-essenciais).

The implementation of the **Geography Essential Core Curriculum** involves a wide range of educational actors, especially teacher educators and people who have taken advanced studies in the fields of Geography and Education. In order to obtain real feedback about the implementation and about the educational and scientific value of the **Geography Essential Core Curriculum**, it is necessary to promote systematic debate – with the participation of teachers, parents and other actors in schools and other educational institutions –, to monitor schools, and to strengthen teacher training.

References

Assessment and Reporting Authority (ACARA) (SD). *Australian Curriculum. Geography*. https://www.australiancurriculum.edu.au/f-10-curriculum/humanities-and-social-sciences/Geography/

Beinfried, B. & **Hertig**, P. (SD). *Geography Education: HOW Human Environment-society progresses work.* in Encyclopedia of Life Support Systems (EOLSS). http://www.eolss.net/Sample-Chapters/C01/E6-06B-46.pdf

Eurydice (2019). *National Reforms in School Education*. https://eacea.ec.europa.eu/national-policies/eurydice/content/national-reforms-school-education-53_en

Finnish National Agency for Education (2014). *Basic Education.* Finland. http://www.oph.fi/english/curricula_and_qualifications/basic_education

Magner, T. J., **Saltrick**, S., **Wesolowski**, & **Iowa**, K. (SD) *Century Skills Maps*. https://www.actfl.org/sites/default/files/pdfs/21stCenturySkillsMap/p21_worldlanguagesmap.pdf

Ministério da Educação (1991). *Organização Curricular e Programa de História e Geografia de Portugal. 2º Ciclo*. Vol I. Direção Geral de Educação. http://www.dge.mec.pt/sites/default/files/ficheiros/eb_hgp_programa_2c1.pdf

Ministério da Educação (1991). *Organização Curricular e Programa de História e Geografia de Portugal. 2º Ciclo*. Vol II. Direção Geral de Educação. http://www.dge.mec.pt/sites/default/files/ficheiros/eb_hgp_programa_2c2.pdf

Ministério da Educação (2001). *Programa de Geografia A – 10º e 11º Ano*. Direção Geral de Educação. http://www.dge.mec.pt/sites/default/files/Secundario/Documentos/Documentos_Disciplinas_novo/Cursos_Cientifico_Humanisticos/geografia_a_10_11.pdf

Ministério da Educação (2002). *Orientações curriculares de Geografia – 3º Ciclo*. Direção Geral de Educação. http://www.dge.mec.pt/sites/default/files/ficheiros/eb_geog_orient_curriculares_3c.pdf

Ministério da Educação (2002). Pr*ograma de Geografia C – 12º Ano. Direção Geral de Educação*. http://www.dge.mec.

pt/sites/default/files/Secundario/Documentos/Documentos_Disciplinas_novo/Curso_Ciencias_Tecnologias/Documentos/geografia_c_12.pdf

Ministério da Educação (2004). *Organização Curricular e Programa de Estudo do Meio – 1º Ciclo*. 4ª Edição. Direção Geral de Educação. http://www.dge.mec.pt/sites/default/files/Basico/Metas/Estudo_Meio/eb_em_programa_1c.pdf

Ministério da Educação e da Ciência (2013). *Metas curriculares para a história e Geografia de Portugal do Ensino Básico – 2º ciclo*. Direcção Geral de Educação. http://www.dge.mec.pt/sites/default/files/ficheiros/eb_hgp_metas_curriculares_2_ciclo.pdf

Ministério da Educação e da Ciência (2013). *Objetivos curriculares para Geografia da educação básica – 3º ciclo*. Direcção Geral de Educação. http://www.dge.mec.pt/sites/default/files/ficheiros/metas_curriculares_geog_eb.pdf

Ministry of Education. British Columbia (SD). B.C. 's New Curriculum. Available at: https://curriculum.gov.bc.ca/

Ministry of Education (2007). ***The New Zealand Curriculum. New Zealand***. http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum

Ministry of Education. Singapore (2016). *Geography Syllabus Lower Secondary Express Course Normal (Academic) course.* https://www.moe.gov.sg/docs/defaultsource/document/education/syllabuses/humanities/files/2014-Geography--%28lower-secondary%29-syllabuses.pdf

Ministry of Education (2013). *Geography Programs of study: Key Stage 3 National curriculum in England*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/239087/SECONDARY_national_curriculum_-_Geography.pdf

OECD (SD). *The OECD Learning Compass 2030*. http://www.oecd.org/education/2030-project/teaching-and-learning/learning/

UGI. (SD). *Lucerne Declaration on Geographic Education for sustainable development*. http://www.igu-cge.org/Charters-pdf/portuguese.pdf

Zwartjes, L. (2012). *GI Learner. Creating a learning line on spatial thinking*. https://www.academia.edu/2127522/Creating_a_learning_line_on_spatial_thinking_in_education

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