Curriculum autonomy policies:

international trends, tensions and transformations

Editors

Sílvia de Almeida Francisco Sousa Maria Figueiredo







With support from



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EDITORS

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EDITION

CICS.NOVA - Interdisciplinary Centre of Social Sciences of NOVA University of Lisbon, School of Social Sciences and Humanities (NOVA FCSH), Colégio Almada Negreiros (CAN) - Campus de Campolide, 1070-312 Lisbon, Portugal

GRAPHIC DESIGN

Inês Bento

SUPPORT

Calouste Gulbenkian Foundation

ISBN

978-989-97344-6-3

DO

https://doi.org/10.34619/qqjq-cqt0

PUBLICATION DATE

2022

PUBLICATION SITE

Lisbon

PEER REVIEW

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This work is financed by national funds through FCT - Foundation for Science and Technology, I.P., within the scope of the project «UIDB/04647/2020» of CICS.NOVA - Interdisciplinary Centre of Social Sciences of Universidade Nova de Lisboa.







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Table of Contents

	Editorial introduction	07
1	Curriculum and Knowledge	14
CHAPTER 1	Knowledge, curriculum and the Sociology of Education, Michael Young	15
CHAPTER 2	Knowledge and curriculum. Curriculum integration in Portugal	22
	– a socio-historical approach, Sílvia de Almeida	
CHAPTER 3	Tensions and (re)transformations in the Portuguese Early Childhood	45
	Education curriculum, Maria Figueiredo	
CHAPTER 4	Curriculum Studies: a European note on non-epistemological	59
	crisis in an era of accountability policies, José A. Pacheco, Joana Sousa,	
	Ila Beatriz Maia and Sofia Rodrigues	
2	Curriculum Policies	76
CHAPTER 5	The social construction of the curriculum: the case of Portugal	77
	and Spain (1970-2005), Pedro Abrantes	
CHAPTER 6	Curriculum and teacher education in secondary school policies in Brazil,	88
	Menga Lüdke and Felipe Ferreira	
3	Participatory Curriculum Design	99
CHAPTER 7	Why do we need curriculum autonomy? A (re)assertion of relevance	100
	as a key-issue in Curriculum Studies, Francisco Sousa	
CHAPTER 8	Collaboration between teachers' associations on the curriculum	110
	design of essential learning in Portugal, Sílvia de Almeida,	
	Joana Viana, Natália Barcelos, Maria do Céu Roldão and Helena Peralta	
CHAPTER 9	The construction of Geography essential core curriculum for the 21st century,	146
	Ana Cristina Câmara and Emília Sande Lemos	

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 schools¹. 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 subject². 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).

 $^{^2}$ João Barroso (1995) analysed the wide debate on the units of class and subject in the 19^{th} 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 so-ciologist, 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 programme⁴.

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 $21^{\rm st}$ 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.

This work is financed by national funds through FCT - Foundation for Science and Technology, I.P., within the scope of the project «UIDB/04647/2020» of CICS.NOVA - Interdisciplinary Centre of Social Sciences of NOVA University of Lisbon.

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