Inés Dussel

The Shifting Boundaries of School Subjects in Contemporary Curriculum Reforms

Towards a Post-Disciplinary Curriculum?1

Abstract: School subjects have been criticized for their inability to make room for 21st century skills and for being disconnected from contemporary modes of knowledge production that work in cross-disciplinary and creative ways. However, other voices have claimed that post-disciplinary curricula underestimate the importance of the construction of intergenerational, specialized conversations about knowledge in schools. This article looks at contemporary curriculum reforms in order to analyze how they relate to these shifts and debates about disciplinary knowledge. The study presents eight curriculum documents set in effect between 2004 and 2018, which act as national regulatory frameworks for compulsory education in Latin America, Europe and Australia. Based on a critical and historical approach to school disciplines and disciplined knowledge, it is discussed how these documents organize, hierarchize and classify school knowledge, and the role and place they allocate to older forms of disciplinary knowledge as well as to new, post-disciplinary organizations. The findings point to complex developments in which both weaker disciplinary frames and the disciplinarization of new content (artistic, design, and technological education) can be observed. Also, the documents express significant national differences, which are telling of divergent political priorities and particular pedagogical traditions that play their part in the configuration of the curriculum frameworks. This approach intends to produce a more complex argument about current curriculum reform trends that debunks the idea that there is an unstoppable standardization around 21st century competences.

Keywords: Curriculum, Curriculum Studies, School Subjects, Disciplinary Knowledge, Cross-National Comparison

This paper was written during my research stay at the Faculty of Humanities and Social Sciences, Humboldt-Universität zu Berlin, made possible by the generous support of the Humboldt Research Award of the Alexander von Humboldt Foundation and by Dr. Marcelo Caruso's hospitality. It originated in a study commissioned by the Uruguayan National Administration of Public Education to support their curriculum reform process, funded by the InterAmerican Development Bank. I thank Antonio Romano, Nicolás Alonso, and Marcelo Pérez Alfaro for their generous input during the initial research, and Marcelo Caruso, Sabine Reh, and Florian Waldow for our continuing dialogues about the history and present of school curriculum and knowledge.

1. Introduction: School Knowledge and Curriculum Reforms

In 2017 newspapers announced that Finland, reputed as one of the best educational system in the world, would eliminate school subjects and embrace project-based learning wholeheartedly. While Finnish curriculum authorities were more cautious in their timeline and academics warned that this idea is more than a century old, the headlines seemed to capture the feeling that disciplines are "a thing of the past" (Spiller, 2017), and that education needs to move beyond the compartmentalization of knowledge implied by school subjects.

Finland is not alone in this trend. School subjects are criticized for their inability to make room for 21st century skills such as digital literacies, social skills, ethical conduct and intercultural understanding, and to respond to the challenges of a globalized economy (OECD, 2010). But the demands are not only external: for several decades now, there has been a movement that challenges specialization and promotes cross-disciplinary work around specific problems, shaking up the older forms of disciplinary teaching (Yates, Woelert, Millar & O'Connor, 2017). However, prominent educators have argued that these critiques and trends underestimate the importance of the accumulation of knowledge and the construction of intergenerational, specialized conversations that take disciplinary forms. Among others, Michael Young has argued that disciplines constitute powerful knowledge that is not equivalent to common-sensical ways of knowing and that requires a systematic induction into specialized fields of inquiry, with their own vocabularies and procedures (Young & Muller, 2016).

In this article, I look at the effects of these shifts and debates about school knowledge in contemporary curriculum reforms. I present a study of eight curriculum documents set in effect between 2004 and 2018, which act as national regulatory frameworks for compulsory education. Most of these documents include 21st century skills and competences within their basic principles. The countries were selected considering their different curricular traditions and patterns of school organization (Hopmann, 2003; Westbury et al., 2016), and are from Latin America (Argentina, Brazil, Mexico, Peru), Europe (England, Finland, France) and Australia. I analyze these documents in terms of how they organize, hierarchize and classify school knowledge, allocating value or primacy to older forms of disciplinary knowledge as well as to new, post-disciplinary organizations (Bernstein, 1975; Foucault, 1989). In my study, I use a political epistemology of school knowledge derived from histories of curriculum (D'Enfert & Lebeaume, 2015; Troehler, 2016; Chervel, 2006) and post-Foucauldian and materialist histories of science and knowledge (Daston & Galison, 2007; Bowker, 2005).

The argument is organized in five sections. In the first one, I discuss the shift from disciplined-based curricula to the post- or de-disciplinary configurations of school knowledge from the 1960s to the present. In the second and third sections, I present the study and some of its theoretical and methodological assumptions, followed by the eight cases that are included in its corpus. In the fourth section, I introduce some crossnational comparisons that analyze the configurations of knowledge privileged in these documents, discussing the continuities and changes in the classification and organization of school knowledge. In the last section, I present some reflections on the curricular map that emerges out of this study. This map is not decisively de-disciplinary, as the media talk says; it combines disciplinary subjects with priorities, competences or knowledge domains in ways that introduce new tensions and that will require pedagogical and organizational changes to be successful.

2. Disciplining and De-Disciplining the Curriculum

Disciplines as specialized fields of inquiry emerged in the late 18th and early 19th century², and were both cultural constellations, with particular ways of producing, validating, and transmitting knowledge with attached moral values, and organizational structures that had their institutions and conferences, training methods and spaces, journals and books, among other features (Yates et al, 2017).³ Disciplines are usually associated with professional bodies and university structures; however, it is important to keep in mind that disciplines as scholarly knowledge practices sometimes found their site outside universities, that their link with professionalization has not been homogeneous, and that their boundaries have always been more slippery than their critique assumes.

School subjects, the main focus of this article, do not have a lineal relationship to university disciplines or professional bodies. Daniel Troehler, building on Ivor Goodson and Thomas Popkewitz' contributions, defines school subjects as "shifting amalgamations" of traditions and groups, and as "expressions of particular cultural and alchemistic hopes and strategies" (Troehler, 2016, p. 282). Subjects involve particular ways of validating knowledge – such as its value for producing loyal citizens – or organizations – such as teachers' professional associations or unions, state programs, school textbooks or parents' associations – that are not only different from those that characterize university fields but also quite independent. Because of these particularities, there are local and national variations in school subjects (Troehler, 2016). For example, Herbert Kliebard has documented how the Life adjustment education movement in US education in the 1940s proposed a Basic Living curriculum that included units such as Basic Urges, Wants and Needs, or Making Friends and Keeping Them (Kliebard, 1987,

² This reference to disciplines as fields of inquiry does not ignore a longer history of the term: "Disciplina (...) is a word with a complex classical and medieval Christian lineage. Whereas the classical meaning emphasizes the objects of instruction and cognition, the medieval Christian meaning focuses on the means of enforcing the successful transmission of a teaching through penance or punishment. Both meanings were already present in the Greek term παιδεία (paideia)" (Schnapp, 2017, p. 506). To some extent, both are also present in nineteenth-century disciplines, yet they acquired an institutional form that radically changed how they operated.

³ These brief but dense statements are based on post-Foucauldian histories of science and knowledge that problematize the hierarchies of knowledges and study the material practices and spaces in which knowledge is produced (Daston & Galison, 2007; Bowker, 2005).

p. 256), units that would have been unconceivable in other educational systems. André Chervel's study of the history of the teaching of language in France is another excellent example of the relationship of school subjects to national traditions and priorities, as well as to local conditions; a case in point is the history of the teaching of spelling (orthographe), whose rules were dictated not by the French Académie but by printers and teachers who pushed for simplified typography in order to support mass schooling in the 18th and 19th centuries. This simplification was infused with political and cultural hierarchies that were key to the production of national identity, in which the mastery of written French was and is still highly valued (Chervel, 2006; Rockwell, 2012 for a contemporary perspective). This approach to the historical production of school subjects makes it clear that the critical mantra against "traditional school subjects" is not accurate, because subjects change internally and externally, and they do not always represent established disciplines or bodies of knowledge sanctioned by academic institutions.

But these shifts and nuances have not been an impediment for the relentless critiques that have been raised against school disciplines for over a century now. Some of the critiques have pointed to the artificial separation of knowledge into rigid or bounded compartments and the hierarchization of scholarly knowledge practices over other (everyday, popular or indigenous) knowledges. In schools, alternative modes of organizing knowledge have been tried out, such as project-methods, centers of interest, and more recently key-competences curricula.⁴ At the university level, the challenge has implied epistemic as well as organizational changes, for example the reorganization of departments in area or topical studies or in research clusters that work in cross-disciplinary ways around specific problems (what was defined as Mode 2 of knowledge production, see Gibbons et al., 1994). This challenge has a history that is worth recalling, because it speaks of its entanglement with moral and political categories. According to Jamie Cohen-Cole, the equivalence between disciplines and rigid and narrow divisions started in the 1930s and became more pronounced during the Cold War. Interdisciplinarity emerged as an epistemic, political, and moral ideal: "interdisciplinary work (...) marked an individual as creative, practical, open minded, tolerant, and scientific" (Cohen-Cole, 2014, p. 67); rigid disciplines were seen as symptomatic of authoritarian minds. Cross-disciplinary collaboration made individuals more democratic, as they had to negotiate among different contexts and traditions; they were also better equipped to understand the complexities of the natural and the social world (Cohen-Cole, 2014, p. 101).

These movements had their effects in school curriculum. One of the most interesting experiments of a new (inter)disciplinarity in schools was Jerome Bruner's creation of a social science curriculum in 1964-1965, "Man: A Course of Study" (MACOS),

⁴ In this series, the history of art and design education has only recently started to be included. For example, the Bauhaus in Weimar Germany and the Vkhutemas in Soviet Russia were both early examples of institutionalized interdisciplinarity that were largely successful in reconfiguring the curriculum of institutions of higher education (Weizman, 2020).

which focused on language, technology, mythology, social organization, and child rearing (Cohen-Cole, 2014, p. 211). It was to be a new school subject centered on structure and not on content; it was not anti-disciplinarian, but it stated that disciplines were fundamentally a structured way of knowing and not a series of hierarchized contents. MACOS did not last, but the integration of school disciplines into broader areas gained momentum. New subjects emerged that dealt with students' wellbeing or with contemporary problems.

Current debates on school subjects continue to be largely organized on the discursive equivalences between disciplinarity and rigidity or narrowness set in the Cold War era. An influential OECD report on curriculum posits school disciplines as a quintessential part of a culture that values a transmissive pedagogy, centered on academic subjects which do not take into account the needs and motivations of students and disregard real life problems (OECD, 1998). In the 21st century economy, knowledge has to be flexible, modular, open, ubiquitous, and accessible from any point. Disciplines, seen as static and made of predefined content, are not well-suited to prepare the flexible worker/citizen who will have to move through different learning contexts, well beyond those defined by the mastery of traditional bodies of knowledge.⁵ This opposition can also be seen in the rewriting of the 19th century 3 Rs (Reading, wRiting, aRithmetic) into the 21st century 4 Cs (Communication, Collaboration, Creativity, Critique) (Voogt, Dede & Erstad, 2011). The knowledge practices that are legitimated in this shift are transferable competences that do not require an engagement with particular contents that emerge in a specialized field of study.

However, there is an increasing concern that these new practices might end up being more superficial and banal, and favor "a flatter (...) problem-focused perspective that treats the world as composed only of problems in the everyday world, and information and techniques for dealing with these" (Yates et al., 2017, p. 7), and disregards what disciplinary modes of inquiry have constructed over time. Michael Young's notion of powerful knowledge has emerged as a counterforce to the de-disciplinarization of curriculum subjects. Powerful knowledge is linked to specialized, disciplined communities that have procedures to agree on the most reliable knowledge of which we are capable of at any one time (Young & Müller, 2016, p. 178). General competences, divorced from specific content, cannot provide knowledge that has been communally and rigorously proofed. The dangers for democratic life are many, and quite tangible at this particular time. Young's perspective has been accused of conservativism and of neglecting new ways of knowledge production that are non-disciplined, such as those emerging in the Internet (McEneany, 2016), yet his point about what might be lost in a post-disciplinary curriculum remains an important one.

In the next sections, I present an analysis of eight curriculum documents seeking to understand how they are dealing with these debates. Are curriculum texts really moving away from disciplines, following the OECD's call to get rid of a transmissive pedagogy?

⁵ For a poignant critique of these arguments, see Biesta (2015).

Or are they more concerned with introducing the new generations into specialized fields of study, and which would they be?

3. The Study: Some Departure Points and Assumptions

In this study, I analyze eight curriculum documents set into effect between 2004 and 2018. These documents act as national regulatory frameworks for compulsory education that intend to work against vertical and horizontal fragmentation and instead seek to integrate the provision of education with a comprehensive or general orientation about school contents. This choice does not intend to repeat a 'methodological nationalism' that sees nations as the 'natural' or 'evident' container of educational systems. I acknowledge, with Caruso (2018), that the national level needs to be problematized and that the future of comparative research today points more to entangled and connected histories than to the strands of research that take nations for granted. However, curriculum frameworks continue to be nationally framed, and ignoring this would be a serious mistake. The curriculum texts are mostly competence-based and include so-called 21st century skills within their basic principles. The cases were selected considering the year of the last curriculum reform, its national scope, and also that they came from different curricular traditions and patterns of school organization. Four documents come from Latin America - Argentina, Brazil, Mexico and Peru -, three from Europe - England, Finland and France – and the eighth is the Australian case, which proposes new areas and cross-curriculum priorities that might constitute new forms of disciplinarity (Yates et al., 2017, p. 5).

In the analysis, I look at how these documents organize, hierarchize and classify school knowledge, and the role and place they allocate to older forms of disciplinary knowledge as well as to new, post-disciplinary organizations. I am interested in understanding how curriculum codes, that is, the underlying rules that define what counts as legitimate knowledge, configure hierarchies and distributions, allocating value or primacy to some subjects and also establishing some classifications or boundaries between fields of knowledge (Bernstein, 1975; Foucault, 1989). These boundaries can be closed (collection curriculum, with strong boundaries between subjects) or open (integrated curriculum, with weak classification as in project-based designs) (Singh & Harris, 2015). I approach the documents with two main questions: How is curriculum content organized in terms of its basic criteria and hierarchies? Which hierarchies and classifications of knowledges emerge from these documents?

Taking documents as the main corpus in my research is a decision that needs to be justified. In my study, I consider curriculum texts as public documents that seek to regulate teaching and learning practices in schools, but I am aware that their regulatory power has to be interrogated in order to analyze their specific, always situated (in) efficacy to organize practices and values (O'Donnell, 1998). Their quality as public documents makes them a privileged device for commoning, a central matter for schooling. Goodson defines the written curriculum as "a testimony, a documentary source, a

changing map of the terrain" (1995, p. 16). The curricular map objectifies the spaces of knowledge and turns them into a common object, an inscription device in which each one can locate themselves in a particular field of relations. As a map, it becomes "a political object, [...] the virtual ground for negotiations, arbitration, exchanges, and communal decisions" (Jacob, 2006, p. 27).

Thus considered, the curriculum document also needs to be approached as a material artefact that is produced by various agents and circulates across the educational system, and whose format, wording, and visual and material qualities produce effects on its readers and users (Nespor, 2002). Curriculum texts are "an administrative tool ultimately directed at the public discourses, or narratives, that address the 'inner work' of the school" (Westbury et al., 2016, p. 737). Thus, texts have to be seen as part of institutional networks that connect organizations, agents (i. e., teachers' organizations and disciplinary bodies), and pedagogical traditions in ways that vary greatly (Hopmann, 2003; Terigi, 2008; Savage & O'Connor, 2015, Sivesind & Westbury, 2016; Yates, 2016). Even if deploying all these dimensions falls beyond the scope of this article, I am deeply aware that curricular texts cannot be considered in isolation from these other conditions in which they are inscribed.

Last but not least, the analysis intends to build up a cross-national comparison, but it is not interested in supporting a neo-institutionalist approach to curriculum reform or in analyzing patterns for transnational policy borrowing (Meyer, 2006; Steiner-Khamsi, 2014). While these perspectives have their merits in underlining the effects of transnational regimes in school regulation and governance, in this research I am seeking to produce a symptomatic reading of the texts. The notion of 'systematic reading' comes from Roland Barthes but can also be linked to Basil Bernstein's analysis of pedagogic messages as regulating what is thinkable and unthinkable, said and unsaid (Fendler, 2017). This reading is concerned with what is said and what is silenced by their ordering of knowledge in particular sequences and classifications, which assumes different forms in each case. In other words, I will look at these texts not to find standardizing trends but to see which maps for school knowledge they define. These maps might help understand – as Lyn Yates puts it – "what is actually not closed or is at work differently in different national settings within what seems from other vantage points to be a simple shifting consensus" (2016, p. 372). Through this approach, I hope to produce a more complex argument about current curriculum reform trends than the mere standardization following the global push for 21st century competences that some of the literature seems to support.

4. The Cases: Looking at Recent Curriculum Frameworks Through the Lens of Content Organization

I will now present the eight national curriculum frameworks that were analyzed in this study, which are introduced in alphabetical order. In what follows, descriptions of national cases are presented only summarily for the sake of clarity. In Table 1, there is a synthesis of the main features of each curriculum framework, which stresses the criteria used for the organization of content knowledge in the curriculum. I consider both principal and auxiliary criteria, as they are both telling of the ways in which content is classified and hierarchized by the frameworks.

4.1 Argentina

The Core Priority Learnings (Núcleo de Aprendizajes Prioritarios, NAPs), which is Argentina's national curriculum framework, was defined in three moments: 2004 for primary schools, 2012 for secondary schools, and a 2018 addition of a new subject for all school levels: "Digital Education, Programming and Robotics." The NAPs are not contained in a unified document but in a set of 21 booklets that follow the organizational and pedagogical structure of each level: For preschool and primary schools they are organized by cycle, while for secondary schools there is a separate booklet for each subject and cycle (8 in lower secondary, 7 in upper secondary). Significantly, there is a separate document for 7th grade (the transition year between primary and secondary) and for two school subjects: Foreign Languages and Digital Education, Programming, and Robotics.

The NAPs are subject-based, but their main concern is the horizontal integration of school levels or cycles and the progression across levels. Throughout primary and secondary, there are eight core areas: Language, Mathematics, Social Sciences (differentiated into disciplines at the secondary level), Natural Sciences (also divided in secondary schools), Technological Education, Physical Education, Ethical and Citizenship Education, and Artistic Education (with four disciplines from primary level onwards: Visual Arts, Music, Theatre, and Arts of Movement). Each subject is treated in a similar way: the booklet starts with a common introduction of its epistemic and pedagogical principles and includes a year-by-year distribution of expected learnings organized in three or four axes. There are no explicit assessment criteria.

4.2 Australia

The Australian National Curriculum was launched in 2010, and it was the first national document to regulate the curriculum in all six states (Savage & O'Connor, 2015). According to ACARA (Australian Curriculum, Assessment and Reporting Authority), it presents a progression of learning in three dimensions: disciplinary subjects (contain-

Country Curriculum Frame – Year of	Years of schooling	Criteria for content organization	ıtion	Transversal Competences or Focuses	Number of school subjects
document		Principal criteria	Auxiliary		
Argentina Core of Priority Learnings 2004, 2012, 2018	13 years (1 Preschool, 6+1 Primary, 5 Secondary)	Cycles and Grades, except unified documents for Special subjects: Foreign Languages // Digital Education, Programming and Robotics	Subjects	No explicit references	Preschool: no subject differen- tiation 10 (primary) 10 (tower secondary) 9 (upper secondary)
Australia National Curriculum 2010 (rev. 2016)	11 years (Foundation to 10 th grade)	Learning Areas and Subjects	Grades or band of grades	3 Curriculum Priorities: Aboriginal-Torres Strait Islanders histories and languages. Sustainability, Australia's engagement with Asia General capabilities − 21 st century skills	8 Learning Areas: English; Humanities and Social Sciences; Arts; Technologies; Languages; Mathematics; Science; Health and Physical Education. 33 subjects total.
Brazil Common Curricular National Base 2017	9 years Fundamental School (5 Primary and 4 Middle School)	Areas and Subjects	Grades and Cycles	10 General Competences (knowledge, values, digital literacy, moral and civic attitudes)	4 Areas: Languages, Human Sciences, Sciences, Mathemat- ics. Languages and HS divided in subjects. 7 subjects since Grade 1, plus English since Grade 6.
England National Curriculum 2014	11 years (KS 1 to 4, primary and secondary)	Subjects	Cycles (Key Stages) and Grades	Literacy and numeracy	Relatively stable throughout all cycles (10 to 12, except for KS4)
Finland National Curriculum 2014	9 years (Common school)	Cycles and Grades	Subjects	7 Transversal 21st century com- petences	Increasing with each school cycle (11 to 18)
France Common Base of Knowledges, Competences and Culture – 2015 Programs of Study for Cycles II, III, IV – 2015	9 years (Cycles II, III and IV, primary and secondary schools)	Formative Domains	Cycles (II, III, IV) Subjects	Transversal competences within domains	Increasing with cycle: 7 subjects (Cycle II), 10 (C III), 13 (C IV)

Country Curriculum Frame – Year of	Years of schooling	Criteria for content organization	ation	Transversal Competences	Number of school subjects
document		Principal criteria	Auxiliary		
Mexico Key Learnings for Basic Education 2017	12 (3 preschool, 6 Primary, 3 Lower secondary)	Three components: Academic fields, Personal and social development, Curricular autonomy	Subjects and Grades	General competences	Increasing with cycle: 6 in Preschool, 9 in Primary, 11 in secondary), plus locally defined subjects (Curricular autonomy spaces)
Peru National Curriculum 2016	16 (5 years preschool, 6 primary, 5 secondary)	29 Competences + 2 for religious education (non-mandatory)	Achievement standards Curricular Areas	7 Transversal focuses: rights, inclusive, intercultural, gender equality, environmental, orientation towards the common good, quest for excellence.	4-6 (preschools) 9 (primary) 11 (secondary)

Tab. 1: Cross-National Comparison of Curriculum Frameworks

ing knowledge, skills, and understanding), cross-curriculum priorities, and general capabilities.

In relation to disciplinary knowledge, the curriculum is classified, not particularly innovatively, in eight Learning Areas: English; Humanities and Social Sciences (HASS); Arts; Technologies; Languages; Mathematics; Science; and Health and Physical Education. The Learning Areas have a common framework that consists of key ideas, content structure, and a glossary or vocabulary that advances the idea that areas are defined by a shared specialized language. Some of the areas include only one discipline (English, Mathematics), but most include several; the area with more specialized subfields is Languages (17, including classical, aboriginal, sign, and modern languages, of which several are Asian). Each school subject presents achievement standards and work samples that are organized by year (English, HASS, Math, Science) or by a band of two or three years (the rest of the disciplines).

Along this disciplinary structure, the Australian National Curriculum proposes three cross-curriculum priorities: Aboriginal and Torres Strait Islander Histories and Cultures; Asia and Australia's Engagement with Asia; and Sustainability, which point to concerns that are to be addressed by all areas and disciplines. There are seven general capabilities mostly related to 21st century critical skills. According to some scholars, this curriculum structure "responds to a number of different and potentially competing arguments about what students 'should know and be able to do', by marrying traditional disciplinary knowledge with global twenty-first century skills" (Savage & O'Connor, 2015, p. 617). In 2016 the Conservative government introduced some reforms that marked a shift towards more nationalistic contents, particularly in the areas of English and HASS (Yates et al., 2017, p. 43).

4.3 Brazil

The National Curricular Common Base (BNCC) was approved in 2017 and started to be implemented in 2018. The document sets 10 general competences as the pillars of education, and is structured in four knowledge areas: Mathematics, Natural Sciences, Human Sciences, and Languages. In two cases, Human Sciences (HS) and Languages, they include components or school subjects (History and Geography for HS, and Portuguese, English – for Grade 6 and over –, Art, and Physical Education for Languages, an interesting grouping that stresses the linguistic practices involved in these subjects).

The Areas are conceived as a way to favor the communication among subjects while still preserving the specificities and knowledges constructed in each field. When applicable, the area is split into components or subjects. Each subject has a complex structure of broad axis, thematic units, objects of knowledge, and skills. The distribution of the content is grade by grade, except for Portuguese, Art, and Physical Education,

⁶ In the last two years of compulsory schooling there is a non-mandatory subject: Work Studies, for which curricular contents are provided.

where they are distributed by cycle. There is a detailed progression of learning expected for each discipline and/or area, formulated as instructional objectives with a complex notation made of letters and numbers (Level, Year, Area or Discipline, Numbered Objective). Within Human Sciences, History and Geography are separate subjects from Grade 1, but Natural Science has an interdisciplinary structure throughout the entire curriculum, which shows that each area follows different criteria for organizing knowledge.

4.4 England

The National Curriculum Framework document dates from 2014, with an additional document for Science issued in 2016. It is organized into four Key Stages (KS) that make up the cycles of schooling: KS1 (Grades 1-2), KS2 (3-6), KS3 (7-9) and KS4 (10-11). The document includes 12 Programs of Study for the three Core Subjects (English, Mathematics, Science) and nine Foundation Subjects (Art and Design, Citizenship, Computing, Design and Technology, Geography, History, Languages, Music, Physical Education).⁷

The English curriculum is clearly a "PISA curriculum", with a significant weight on the subjects that are evaluated by international tests (Alexander, 2014): The Core Subjects occupy 209 of the 264-page document. Each Program of Study includes a brief overview of the purposes and aims of the subject, and a distribution of the contents and attainment targets by year or by Key Stage. The number of subjects is relatively stable throughout the years: 10 in KS, 11 in KS2, 12 in KS3, and in the last stage of secondary schools there are 6 mandatory subjects plus an undefined number of courses that have to respond to four entitlement areas. Schools can redistribute the content in different years but not in different Key Stages; what is mandatory is that at the end of each Key Stage students have met the attainment targets. In relation to disciplinarity, there are some cross-subject references in some programs, but most subjects are clearly bounded. An exception is design, which makes up part of two school subjects: Arts and Design, and Design and Technology.

4.5 Finland

The Finnish National Curriculum was approved in 2014; it is defined as holistic and purportedly seeks to promote students' learning and well-being (Pietarinen, Pyhalto & Soini, 2017). In contrast to other documents that privilege content, the text has a defined

⁷ Even if there are no mandatory programs, schools are obliged to teach religious education and relationships education at all key stages, to which sex education is added at the secondary level (KS3 and KS4). Also, while not statutory, there is an increased pressure to include Personal, Social, Health and Economic Education (PSHE) as part of the curriculum (Department for Education, 2019; Long, 2018).

pedagogical language, with continuous references to guidance and support to enhance students' learnings, attention to transitions between cycles, and criteria for assessment that take into account children's rights. It is organized by cycles (Grades 1–2, 3–6 and 7–9) and by academic school subjects.

There are 11 subjects for the first two grades, 13 for Grades 3–6, and 18 for Grades 7–9; some of the subjects are area-oriented (Environmental Studies) while others are single disciplines (Mathematics, Music, Ethics, History). There are seven transversal competences that include 21st century skills together with self-regulation and safety skills, which was one of the strategies to rethink the goals and contents of school subjects. However, their presence does not undermine the distinctive profile of each school subject. While some disciplines such as Mother Tongue or Visual Arts follow a pragmatic approach in terms of contexts of practice, others such as Mathematics or History are structured in terms of themes and methodologies – i. e., chronologically defined periods for History. Social Studies and Environmental Studies have a mixed approach, combining topics and competences. The curriculum promotes children's participation in deciding some learning modules together with their teachers. The integration of disciplines is supposed to happen through transversal competences, which are linked to each objective and content area. The assessment is centered on what each student can achieve in each subject.

4.6 France

The Common Base for Knowledges, Competences, and Culture was passed in March 2015. This document is different from the other texts as it organizes school knowledge into five formative domains:

- Languages for Thinking and Communicating (French, foreign languages, scientific and mathematical languages, informational and media languages, arts and body languages);
- 2) Methods and Tools for Learning (access to information and documentation, information tools, collective and individual projects, self-organization);
- 3) Formation of the Person and the Citizen (moral and civic education, rules and law);

These subjects include: Mother Tongue and Literature, Second National Language, Foreign Languages, Mathematics, Environmental Studies, Religion, Ethics, Music, Visual Arts, Crafts, Physical Education; from Grade 3 onwards, History and Social Studies are added; from Grade 7 onwards, Biology, Geography, Physics, Health Education, Home Economics (including financial skills, food knowledge, housing and living together). These subjects are not all offered in the same school year but may be distributed throughout the school cycle. In relation to making room for students' cultures, the Finnish curriculum is remarkable in that it presents five possibilities for Mother Tongue Language and Literature: Finnish, Swedish, Sami, Roma, and Sign Language. However, Second National Language can only be Finnish or Swedish.

- 4) Natural Systems and Technical Systems (scientific and technical approach to Earth and the universe);
- 5) Representations of the World and of Human Activity (understanding societies in time and space, interpreting cultural productions). (France, Socle Commun, 2015, pp. 3-8)

These domains of knowledge are a significant innovation of this curriculum framework. They are not equivalent to disciplines; in fact, the very definition of domains relies heavily on the understanding of knowledge(s)⁹ as a human, social production mediated by material practices (systems of inscription and documentation, thinking rationales or paradigms, among others). Another noteworthy feature is that the French document is among the few that stresses the relevance of methods and tools not just as procedural knowledge but as a central domain for learning in itself, an emphasis that goes back at least to the 1985 commission lead by Pierre Bourdieu (Collège de France, 1985).

Along with the Common Base, there is another document that mandates Programs for School Cycles 2 (Grades 1–2 of primary schools), 3 (Grades 3–5 of primary), and 4 (4 years of secondary collèges) – early childhood education is not included in the document. These programs are subject-based and include knowledges and competences for each cycle but are not distributed by years or grades. They make explicit connections between each subject and the formative domains defined by the Socle Commun. 10 The subjects follow well-known patterns of knowledge organization, and move from a more integrated curriculum code in Cycle 2 (primary) to a disciplinary one in Cycle 4 (secondary). The presence of artistic education is remarkable: subjects include Plastic Arts, Music, Art History, and the ambiguous status of Media education, which includes both information science and film and photographic studies (Bonnéry, 2018).

4.7 Mexico

The most recent curricular document for basic education was passed in 2017, but its implementation was halted by the new administration in 2019. It is an ambitious document (676 pages), which includes a long introduction about the purposes of schooling

It is significant that knowledges is named as a plural noun, at the same time that culture remains singular (as is the person and the citizen in domain 3).

¹⁰ The subjects increase gradually with the cycles, going from seven in Cycle 2 (French, Modern Languages (including regional), Artistic educations (plural), Physical and sports education, Moral and civic education, Questioning the world, Mathematics), to 10 in Cycle 3 (all the previous ones, but art education now includes three subjects: Plastic Arts, Musical education, Art history; and Questioning the world gives way to two subjects: History and Geography, and Science and Technology). In Cycle 4, there are 13 subjects: all the previous ones, with Science and Technology now divided into 3 subjects: Physics-Chemistry, Sciences of Life and Earth, Technology; and the emergence of Media and information education.

in the 21st century and pedagogical concepts such as competences, key learnings, and planning.

The Framework, entitled *Key Learnings*, intends to unify the curriculum for preschools, primary and secondary schools (12 years in total) and is said to slide away from the strict competence-based framework that characterized the previous 2011 curriculum (Chuquilín Cubas & Zagaceta, 2017). It is structured in three components: Fields of Academic Formation (Language and Communication, Mathematical Thinking, Exploration and Understanding of the Natural and Social World), Areas of Personal and Social Development (Arts, Socioemotional Education, Physical Education), and Spheres of Curricular Autonomy (to be developed by schools, which can include expanding existing areas or including regional knowledge, social projects, or new relevant knowledge). Each subject in the first two components is presented extensively, including detailed tables with the progression of expected learning (*dosificación* or dosage) throughout the 12 years.

The diversification of subjects increases with the trajectory of schooling, ranging from six subjects in preschool 1 to 11 in lower secondary. One important innovation of this document is the inclusion of Indigenous Languages as Mother Tongue – and as Second Language in some cases – for indigenous schools;¹¹ yet Citizenship and Ethical Education, History, and Geography remain oriented by centralist and nationalistic content (Bickmore et al., 2017). While they are considered school subjects, Art and Physical Education are part of the Area for Personal and Social Development, which is not a field with specialized techniques and language, as in Brazil, France, or Australia. Socioemotional Education becomes a subject on its own, although questions have been raised about how it will be implemented (INEE, 2018).

4.8 Perú

The Peruvian National Curriculum was passed in 2016.¹² It includes competences and content knowledge for all basic education levels, with an emphasis on vertical integration and not so much on horizontal integration among subjects or within school levels. The Curriculum defines seven transversal focuses or perspectives (enfoques): a focus on rights or entitlements (enfoque de derechos), inclusive education, interculturalism, gender equality, environmentalism, orientation towards the common good, and quest for excellence.

¹¹ It has to be taken into account that in Mexico 68 indigenous languages are spoken, with 364 dialects; groups and individuals migrate, making it difficult to territorialize this education. These dynamics present several challenges for educational policies (see Czarny and Salinas, 2018).

¹² A group of conservative parents held a legal battle against the focus on gender equality, and their petition was finally dismissed by the Peruvian Supreme Court in April 2019. See: https://elcomercio.pe/peru/curriculo-enfoque-genero-genero-controversia-informe-noticia-505106-noticia/ [June 11 2020]

The major part of the document is devoted to the 31 general competences that basic education should develop, varying from personal and interpersonal values to concrete content related to particular school subjects, and that are to be articulated in curricular areas. These areas go from 4 in the first preschool years to 11 in secondary. The main four areas are: Language and Communication (which includes Communication, Indigenous language, Spanish as a second language, Art and Culture, and English); Personal-Social Area in preschool, which leads to Religious Education and Personal and Civic Development as separate subjects from primary level onwards, and Social Sciences (only in secondary); Psychomotor Area (Physical Education); and Discovery of the World (later divided into Mathematics, and Science and Technology). It has been noted that most areas lack epistemic unity (Chuquillín Cubas & Zagaceta, 2017). Throughout all school levels, there is a curricular space for tutoring and educational guidance.

With regard to school disciplines, Peru's National Curriculum includes neither programs of study nor epistemic or pedagogical principles that underpin them. Subjects appear as spaces where the learning of competences is deployed, but there is no reference to specialized knowledge or reflections about procedures.

5. Cross-National Comparisons

As said before, the approach taken in this study is interested in looking at the organization, classification and hierarchies of knowledge. I want to point to some common features as well as some differences across these curriculum frameworks, discussing to what extent these reforms are moving away from the disciplinarization of school knowledge and instead embracing 21st century competences as their main organizer. 13

Firstly, most curriculum frameworks share a concern not only with vertical integration across school levels (something that is tautological to their very feature of frameworks for compulsory schooling) but also with horizontal articulation in cycles. All texts include cycles of schooling of 2, 3 or 4 years, both shorter than school levels and longer than the yearly distribution of graded schooling. If sustained, this trend might redefine the division between primary and secondary schools and organize a different rhythm and sequence for schooling. This is also visible in the attainment targets, usually defined by cycles rather than by years or grades. However, for Language and Mathematics most frameworks prefer a detailed sequence that is distributed yearly. This, together with the length of space in the curricular map allocated to these subjects, is a sign of the persistent hierarchy of these bodies of knowledge (the 3 Rs) in national curricula.

¹³ These skills or competences are related to the 4 Cs already mentioned (critical thinking, communication, creativity, collaboration), plus flexibility, problem solving, social and cross-cultural interaction, and digital literacy. They tend to be transversal soft skills that can be learned at any given discipline. The Finnish and the Australian Curriculum include some of them in their general competences framework.

Secondly, the organization of school knowledge in these frameworks is varied, and several organizers can be distinguished: Learning Areas, Formative Domains, Formative Fields, Subjects, Competences. Most of these organizers integrate several subjects, whose rationale and specific content is presented with considerable detail; only in England and Finland are there no areas that group subjects, although some of their school subjects are already interdisciplinary (Art and Design, Environmental Studies).

However, even though there are integrated curricular spaces, and these frameworks are driven by the search for vertical and horizontal integration, in all frameworks school subjects seem to continue to act as the basic organizers of school knowledge. Despite the demands to produce cross-disciplinary connections and to reduce overcrowded curricula, most texts still define a high number of school subjects and seem to delegate the integration of these subjects to school organization or pedagogies, to areas that are broken down into subjects, or to special *ad hoc* modules, as in the Finnish curriculum. Primary schools seem to do better in that respect than secondary schools, with the number of subjects ranging from 7 to 11, while secondary school curricula contain up to 18 subjects. Diversification of school subjects seems to be convergent with school progress, with the underlying assumption that in order to access more complex knowledge it has to be specialized and bounded in particular domains.

The persistence of school subjects as organizers of curriculum text is also evident in another feature of these documents. In several curriculum frameworks it is possible to see the traces of the 'stitching together' of the documents produced by different disciplinary groups; for example, the ways in which each subject organizes its knowledge differs in its distribution (yearly or by cycle), the extension and scope of the prescription, and the categories for organizing content. This speaks of the continuing weight of disciplinary experts and professional groups in the curriculum, and also of the negotiations and (lack of) arbitrations that take place in curriculum commissions (Sivesind & Westbury, 2016).

But even if the subject structure is still the main underlying principle or criteria in most frameworks, subjects themselves are being transformed from within. One can take, for example, the discipline of History, which in some cases has shifted from a sequentially organized set of contents to a problem-based approach that integrates reflections and procedures from Geography, Economics, Sociology, and Cultural Studies (Le Roux, 2004). While the chronological sequence is rarely abandoned, its themes tend to mobilize microhistories and global histories, gender perspectives, material cultures, and the history of knowledge and media, and there is an increased presence of historiographic reflections on sources, archives and narrative forms. Yet, post-colonial and post-national approaches usually encounter strong opposition and tend to be nuanced, silenced or withdrawn, as in Australia, Brazil, and France. Most programs re-

¹⁴ It is clear that, even if the school subjects' titles are the same, the linguistic and epistemic traditions in which disciplinary knowledge have been conceptualized and mobilized are different, and produce different effects in school practices (Friesen, 2018).

main deeply nationalistic and centralist, incorporating minorities' perspectives only to the extent to which they do not question an ideal of national reconciliation (de Cock, 2018).

Overall, national contexts are still important in the classification and hierarchy of knowledges. In the process of curriculum design, it is possible to perceive the persistent "salience of national political activity" (Yates, 2016, p. 369) that explains the movements between competence-based and subject-based curriculum as part of the process of differentiation between administrations or parties, for example in Mexico or England. This political activity also accounts for the relevance of Language, History, and Geography in the curriculum framework, and shows the extent to which schools are still considered to be privileged carriers of national cultures.

However, together with what has already been said on History, the case of Language highlights the fact that nations continue to be "contested projects" (Yates & Grumet, 2011, p. 12). In Mexico and Peru, indigenous languages are being legitimized as Mother Tongues; in Finland, five maternal languages - including Sami, Roma, and Sign-language - are considered valid; in France, room is made for regional languages; in Australia, Aboriginal and Sign-languages are included as part of second language options, as well as several Asian languages. In contrast, foreign languages tend to privilege English as the only option, with the remarkable exception of Australia, whose offer on foreign language is exceptional.

What about new subjects and new ways of organizing knowledge? In relation to the subjects, at the level of compulsory education there do not seem to be too many novelties. The shift towards more presence of the arts and aesthetic disciplines - the "artistisation" of curriculum (Bonnéry, 2018) – is noteworthy, and it seems related to the prevalence of the 'artistic critique' in the new economies of knowledge in cognitive capitalism (Boltanski & Chiapello, 2005) but also to the dominance of expressive pedagogies that build on constructivist critiques of school subjects. The presence of design and digital technologies is increasing, particularly in England and Australia where it is linked both to technology and to media, although it is less marked in Latin American countries. The area of personal wellbeing is receiving more attention, with school subjects that address personal development in some countries. Sex education is a significant silence, except in the case of England; in other countries it is addressed through Health Education, Moral and Civic Education, or Personal Development.

Finally, in relation to the persistence of old curriculum codes, it can be noted that Finland holds to subjects such as Arts Craft and Domestic Economy that, while updated, come from a different era of curriculum design. The same can be said about Religion, which is still present, with varying degrees of secularization and opt-out clauses, in England, Finland, Peru, and Brazil.

As for the new ways of organizing knowledge, most curriculum frameworks include transversal competences that are to be addressed by school subjects, in ways that have been in effect since the 1990s and thus are not new. These connections are either explicitly set for each subject, as in the case of Finland, or can be loosely defined, as in Peru, where competences are privileged over subjects. However, in this study two new forms of organizing knowledge can be identified: the Australian cross-curriculum priorities and the French formative domains.

In the first case, as it has been said, they work as emphases that have to be addressed by all subjects; they are not cognitive or performance skills but political focuses that seek to orient teaching and learning practices. They appear as a new way to order knowledge in terms of its contributions towards a national political project of reconciliation, environmentalism, and the integration of Australia with Asia. In the case of the French formative domains, they are epistemologically more ambitious than the Australian priorities, and try to convey a new organization of knowledge understood as a human, social production mediated by material practices. Most school subjects are seen as languages but also as methods and tools for thinking that carry a moral dimension; while the boundaries of subjects remain in place, the rationale behind the formative domains points to the commonalities and not to the differences between disciplines. Perhaps this curriculum framework will produce some confluences in how subjects are taught that might end with them working in the same ways in the classroom, strengthening disciplined knowledge while relaxing the boundedness of school disciplines (Dussel & Trujillo Reyes, 2018). That said, the attention paid to the relationship between natural and technical systems and to social representations place this curriculum among the most aligned with contemporary views on science and knowledge production that have been produced within highly specialized fields of study. However, the critical point in the coming years will be to see if and how they are translated into each school subject and are successful in having an impact on teachers' practices.

6. Concluding Remarks

As said in the first sections of this article, the curriculum is a public document that can be seen as a map that organizes knowledge in particular ways. As a map that represents positions and demarcates territories, it is also an arena for negotiation, arbitration and renewal of social agreements (Jacob, 2006). The curricular map that emerges out of this study is not decisively anti- or de-disciplinarizing, as the media frenzy suggests. School subjects persist as central organizers of school knowledge, and most curriculum frameworks can still be accused of being overcrowded with a collection of subjects that in most cases have not significantly changed. Also, in the cross-national comparison, it is evident that school subjects such as history or national language share some modes of inquiry, approaches, and lexicon that distinguish them as specialized fields of study.

Yet despite this superficial continuity, there are several trends that point in the direction of shifts and changes. On the one hand, the disciplines are changing internally, adopting constructivist or process-based approaches that make them work in similar ways. On the other hand, there is an increased presence of cognitive and personal skills as goals of instruction, whether as a separate subject or as transversal competences. Together with new curriculum areas, in particular design, technology, media, and environ-

mental studies, these new contents tend to privilege horizontal pedagogies and weaker disciplinary frames (Bernstein, 1975). The "artistisation" of curriculum is a development to follow, which can be read as an expansion of disciplinary knowledge into new fields (film, photography, digital media), but can also speak of the dominance of an expressive pedagogy that is not strongly framed within a specialized field.

Another point worth mentioning is the identification of new ways of organizing knowledge that go beyond subjects or transversal competences, such as the national priorities in Australia or the formative domains in France. But these forms coexist with previous ones, and this coexistence is not without its tensions (Savage & O'Connor, 2015, p. 617). Moreover, in order be effective, these new forms will require pedagogical and organizational changes, for example in teachers' preparation and disposition to work through complex epistemological issues or changing political priorities, and in strengthening networks of support at the school level. The effects of epistemologically oriented interdisciplinarity, such as the French domains of knowledge, upon school subjects are yet to be seen, but they appear as an interesting possibility to produce an "antidisciplinary interdisciplinarity", rigorous yet libertarian, as Tim Ingold advocates. 15

Finally, the study shows the importance of cross-national comparisons that pay attention to national particularities. Although in this article they could not be discussed at length, it was possible to see that national agendas set some priorities that are common (vertical and horizontal integration of systems, for example through cycles of schooling; schools as central carriers of national cultures), but also showed distinctive languages and orderings to define which knowledge is valuable and how it is presented. Beyond what might be seen as a consensus on 21st century competences, curriculum frameworks differ a great deal, due to divergent political priorities and struggles and also to singular pedagogical traditions. The debates on the post-disciplinary curriculum only partially address these differences.

Documents (selection)

[Argentina] Ministerio de Educación, Cultura, Ciencia y Tecnología (2018). Núcleo de Aprendizajes Prioritarios. Educación Digital, Programación y Robótica. Buenos Aires: MECCyT. [Argentina] Ministerio de Educación (2012). Núcleo de Aprendizajes Prioritarios. Ciclo Orientado. Buenos Aires: Ministerio de Educación de la Nación.

¹⁵ The "anti-disciplinary interdisciplinarity," instead of territorializing and "othering" fields of study, works towards a "togethering" as a privileged way of knowledge production (Ingold, 2018, p. 75). Ingold claims that the notion of discipline needs to be rethought not as an "arterial route" with a predefined identity but as "a conversation among fellow travelers following convergent lines of interests" (2018, p. 76), a definition that owes much to Dewey's thought but also to science studies. For him, the problem is not with disciplines per se but with their reduction to "a particular and regimented body of data, method and theory" (2018, p. 76). Still, Ingold does not allow too much room for specialism, or to the idea that to have an accumulative conversation among generations might require some degree of institutionalization.

- [Argentina] Ministerio de Educación (2004). Núcleo de Aprendizajes Prioritarios. Educación Primaria - Primer Ciclo. Buenos Aires: Ministerio de Educación de la Nación.
- [Australia] Australian Curriculum and Reporting Authority (ACARA) (2010). The Australian curriculum F-10. Canberra: ACARA.
- [Brazil] Ministerio de Educação e Cultura (2017). Base Nacional Común Curricular. Educação e a Base, 3rd Version. Brasília: MEC/SEF.
- [England] United Kingdom Department for Education (2014). The national curriculum in England - Framework document. London: Department for Education. https://www.gov.uk/gov ernment/uploads/system/uploads/attachment data/file/381344/Master final national cur riculum 28 Nov.pdf [June 11 2020]
- [England] United Kingdom Department for Education (2019). Relationships education, relationships and sex education (RSE) and health education. Statutory guidance for governing bodies, proprietors, head teachers, principals, senior leadership teams, teachers. https://www. gov.uk/government/publications/relationships-education-relationships-and-sex-educationrse-and-health-education [June 11 2020]
- [Finland] Finnish National Board of Education (2016). National core curriculum for basic education 2014.
- [France] Socle Commun de connaissances, de compétences et de culture. Décret No. 2015-372 du 31-3-2015. Bulletin Officiel No. 17 du 23 Avril 2015, 1–8.
- [France] Ministère de l'Éducation Nationale, de l'Enseignement Supérieure et de la Recherche (2015). Programmes pour les Cycles 2, 3 et 4. Paris: MENESR.
- [México] Secretaría de Educación Pública (2017). Aprendizajes clave para la educación integral, Plan y Programas de Estudio. Ciudad de México: SEP
- [México] Instituto Nacional para la Evaluación de la Educación (INEE) (2018). La educación obligatoria en México. Informe 2018.
- [Perú] Ministerio de Educación (2016). Currículo Nacional de la Educación Básica. Lima: Ministerio de Educación de la República del Perú.

References

- Alexander, R. (2014). Evidence, policy, and the reform of Primary Education: A cautionary tale. Forum, 56(3), 349–375.
- Bernstein, B. (1975). Class, codes, and control. Vol. III: Towards a theory of educational transmission. London: Routledge and Kegan Paul.
- Bickmore, K., Kaderi, A. S., & Guerra-Sua, A. (2017). Creating capacities for peacebuilding citizenship: History and social studies curricula in Bangladesh, Canada, Colombia, and México. Journal of Peace Education, 14(3), 282–309. DOI: https://doi.org/10.1080/17400201.2017 .1365698
- Biesta, G. (2015). Freeing teaching from learning: Opening up existential possibilities in educational relationships. Studies in Philosophy and Education, 34(3), 229–243. DOI: 10.1007/ s11217-014-9454-z
- Boltanski, L., & Chiapello, E. (2005). The new spirit of capitalism (trans. G. Elliott). London: Verso.
- Bonnéry, S. (2018). Art et scolarisation: Tour d'horizon d'un objet de recherche en développement, à la croisée de plusieurs sociologies. Keynote at International Colloquium "Scolarisation de l'art, artistisation de l'école. Sociologie des enseignements artistiques et culturels" (Lyon, 18–19 Jan 2018).
- Bowker, G. (2005). *Memory practices in the sciences*. Cambridge, MA: The MIT Press.

- Caruso, M. (2018). The history of transnational and comparative education. In J. L. Rury & E. H. Tamura (eds.), The Oxford handbook of the history of education (pp. 568–588). Oxford, UK: Oxford University Press.
- Chervel, A. (2006). Histoire de l'enseignement du français du XVIIe au XXe siècle. Paris: Retz.
- Chuquilín Cubas, J., & Zagaceta S.M. (2017). El currículo de la educación básica en tiempos de transformaciones: Los casos de México y Perú. Revista Mexicana de Investigación Educativa, 72(XXII), 109-134.
- Cohen-Cole, J. (2014). The open mind. Cold War politics & the sciences of human nature. Chicago & London: The University of Chicago Press.
- Collège de France (1985). Propositions pour l'enseignement de l'avenir/élaborées à la demande de Monsieur le Président de la République par les professeurs du Collège de France. Paris: Collège de France.
- Czarny, G., & Salinas, G. (2018). Desafíos para la educación escolar indígena para el siglo XXI. Revista Pluralidad v Consenso, 8(38), 86–91.
- Daston, L., & Galison, P. (2007). Objectivity. New York: Zone Books.
- D'Enfert, R., & Lebeaume, J. (eds.) (2015). Réformer les disciplines. Les savoirs scolaires à l'épreuve de la modernité, 1945–1985. Rennes: Presses Universitaires de Rennes.
- De Cock, L. (2018). Sur l'enseignement de l'histoire. Débats, Programmes et Pratiques du XIXe siècle à aujourd'hui. Paris: Éditions Libertalia.
- Dussel, I., & Trujillo Reyes, B. (2018). Nuevas formas de enseñar y aprender? Las posibilidades en conflicto de las tecnologías digitales en la escuela. Perfiles Educativos, XL, pp. 142-178, DOI: https://doi.org/10.22201/iisue.24486167e.2018.Especial.59182
- Fendler L. (2017). Apertures of documentation: Reading images in educational history. Paedagogica Historica, 53(6), 751–762.
- Foucault, M. (1989). The order of things. An archeology of the human sciences. London & New York: Routledge.
- Friesen, N. (2018). Continuing the dialogue: Curriculum, Didaktik and theories of knowledge. Journal of Curriculum Studies, 50(6), 724-732, DOI: 10.1080/00220272.2018.1537377
- Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott P., & Trow, M. (1994). The new production of knowledge: The dynamics of science and research in contemporary societies. London & New York: Sage.
- Goodson, I. (1995). The making of curriculum. Collected essays (2nd Edition). Bristol, PA & London: The Falmer Press.
- Hopmann, S. (2003). On the evaluation of curriculum reforms. Journal of Curriculum Studies, 35(4), 459–478. DOI: https://doi.org/10.1080/00220270305520
- Ingold, T. (2018). Anthropology and/as education. Abingdon, UK & New York: Routledge.
- Jacob, C. (2006). The sovereign map. Theoretical approaches in cartography throughout history (transl. by Tom Conley). Chicago, IL: The University of Chicago Press.
- Kliebard, H. (1987). The struggle for the American curriculum (1893–1958). New York: Routledge and Kegan Paul.
- Le Roux, A. (ed.) (2004). Enseigner l'histoire-géographie par le problème? Paris: L'Harmattan. Long, R. (2018). Personal, social, health and economic education (PSHE) in schools (England).
- Briefing Paper Number 07303. London: House of Commons Library.
- McEneany, E. (2015). Finding knowledge on the internet: Implications for a knowledge-driven curriculum. Journal of Curriculum Studies, 47(6), 802-819. DOI: https://doi.org/10.1080/0 0220272.2015.1089941
- Meyer, J. (2006). World models, national curricula, and the centrality of the individual. In A. Benavot & C. Braslavsky (eds.), School knowledge in comparative and historical perspective: Changing curricula in primary and secondary education (pp. 259–271). Hong Kong: Springer.

- Nespor, J. (2002). Networks and contexts of reform. Journal of Educational Change, 3, 365–
- O'Donnell, G. (1998). Polyarchies and the (un)rule of law in Latin America. Kellogg Institute for International Studies Working Paper Nr 254, Published May 1998. https://kellogg.nd.edu/ documents/1549 [June 06 2020].
- OECD (1998). Making the curriculum work. Paris: OECD.
- OECD (2010). Working paper: 21st century skills and competences for new millennium learners in OECD countries (EDU working paper no. 41). Paris: OECD.
- Pietarinen, J., Pyhalto K., & Soini, T. (2017). Large-scale curriculum reform in Finland Exploring the interrelation between implementation strategy, the function of the reform, and curriculum coherence. The Curriculum Journal, 28(1), 22-40. DOI: https://doi.org/10.1080/0958 5176.2016.1179205
- Rockwell, E. (2012). Appropriating written French: Literacy practices in a Parisian elementary classroom. Reading Research Quarterly, 47(4), 382–403.
- Savage, G., & O'Connor, K. (2015). National agendas in global times: Curriculum reforms in Australia and the USA since the 1980s. *Journal of Education Policy*, 30(5), 609–630.
- Schnapp, J. (2017). On disciplinary finitude. *PMLA*, 132(3), 505–512.
- Singh, P., & Harris, J. (2015). Pedagogic translations. Dominant pedagogic modes and teacher professional identity. In P. Singh, A. Sadovnik & S. Semel (eds.), Toolkits, translation devices and conceptual accounts: Essays on Basil Bernstein's sociology of knowledge (pp. 249–265). New York: Peter Lang.
- Sivesind, K., & Westbury, I. (2016). State-based curriculum-making. Part I. Journal of Curriculum Studies, 48(6), 744–756. DOI: 10.1080/00220272.2016.1186737
- Spiller, P. (2017). Could subjects soon be a thing of the past in Finland? BBC News, 29 May 2017. https://www.bbc.com/news/world-europe-39889523 [June 11 2020].
- Steiner-Khamsi, G. (2014). Cross-national policy borrowing: Understanding reception and translation. Asia Pacific Journal of Education, 34(2), 153-167. DOI:10.1080/02188791.2013.87564
- Terigi, F. (2008). Los cambios en el formato de la escuela secundaria argentina: Por qué son necesarios, por qué son tan difíciles. Revista Propuesta Educativa, 29, 63–71.
- Troehler, D. (2016). Curriculum history or the educational construction of Europe in the long nineteenth century. European Educational Research Journal, 15(3), 279–297.
- Voogt, J., Dede, C., & Erstad, O. (2011). TWG 6: 21st century learning. Paper presented at Edu SummIT 2011. Paris: UNESCO, 10–11 June 2011.
- Weizman, I. (ed.) (2020). Dust & data. Traces of the Bauhaus across 100 Years. Leipzig: Spec-
- Westbury, I., Aspfors, J., Fries, A.-V., Hansén, S.-E., Ohlhaver, F., Rosenmund, M., & Sivesind, K. (2016). Organizing curriculum change: An introduction. Journal of Curriculum Studies, 48(6), 729-743.
- Yates, L. (2016). Europe, transnational curriculum movements and comparative curriculum theorizing. European Educational Research Journal, 15(3), 366–373. DOI: https://doi.org/10. 1177/1474904116644939
- Yates, L., & Grumet, M. (eds.) (2011). Curriculum in today's world. Configuring knowledge, identities, work and politics (World Yearbook of Education 2011). New York & London: Routledge.
- Yates, L., Woelert, P., Millar, V., & O'Connor, K. (2017). Knowledge at the crossroads? Physics and history in the changing world of schools and universities. New York: Springer.
- Young, M., & Muller, J. (2016). Curriculum and the specialization of knowledge. Studies in the sociology of education. New York & London: Routledge.

Zusammenfassung: Schulfächer stehen einerseits in der Kritik, sogenannten ,21stCentury Skills' keinen ausreichenden Raum geben zu können; sie wären stattdessen von den aktuellen Formen fächerübergreifender und kreativer Wissensproduktion abgekoppelt. Andererseits wird behauptet, dass überfachliche bzw. nicht mehr an den herkömmlichen Schulfächern organisierte Lehrpläne die Bedeutung generationenübergreifenden, spezialisierten Wissens für den Schulunterricht unterschätzen. In diesem Artikel wird untersucht, ob und in welcher Weise diese Diskurse um Fachlichkeit aktuelle Reformen von Lehrplänen, deren Konzeption und Implementierung beeinflussen. Hierzu wird eine Studie zu acht Lehrplandokumenten vorgestellt, die als nationale Rahmenregelungen zwischen 2004 und 2018 für das jeweilige Pflichtschulwesen in verschiedenen Ländern Lateinamerika, Europas und in Australien in Kraft traten. Aus der Sicht einer kritischen und historischen Auseinandersetzung mit Schulfächern und disziplinärem Wissen wird diskutiert, wie diese Curricula Schulwissen organisieren, hierarchisieren und klassifizieren. Dabei gerät auch in den Blick, welche Funktion und welchen Stellenwert neue Lehrpläne älteren Formen fachlichen Wissens zuweisen, aber auch, wie überfachliche Ansätze Eingang finden. Die Ergebnisse der Studie weisen dabei auf eine Vielzahl komplexer Entwicklungen hin, in denen sowohl die Abnahme fachlicher Rahmensetzungen als auch eine Disziplinarisierung, eine "Verfachlichung", neuer Bildungsangebote zu beobachten sind. Die Lehrpläne der untersuchten Staaten zeigen im Vergleich erhebliche Unterschiede zueinander auf, denen unterschiedliche pädagogische Traditionen zugrunde liegen, die aber auch Ergebnis differenter politischer Schwerpunktsetzungen sind und die Gestaltung der Lehrplanrahmen beeinflusst haben. Diese Studie soll eine differenzierte Auseinandersetzung mit aktuellen Trends der Lehrplanreform ermöglichen und dabei zugleich die Behauptung entkräften, eine Standardisierung der ,21stCentury Skills' schreite unaufhaltsam voran.

Schlagworte: Curriculumforschung, Lehrplan, Schulfächer, Fachliches Wissen, Transnationaler Vergleich

Adress of Author

Prof. Dr. Inés Dussel, DIE-CINVESTAV, Departamento de Investigaciones Educativas, Centro de Investigación y Estudios Avanzados, Calzada de los Tenorios, 235, Col. Granjas Coapa, Ciudad de México, Mexico, CP 14330

E-Mail: idussel@cinvestav.mx; idussel@gmail.com