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<https://doi.org/10.1057/s41599-020-00601-z>

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Concepts for historical and geographical thinking in Sweden's and Spain's Primary Education curricula

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The goal of this study is to compare the presence of concepts for historical and geographical thinking in the national curricula for Primary Education in Spain and Sweden in order to analyze if these thinking concepts can enable new active learning methodologies in the Social Science classroom. The comparative study is based on a qualitative investigation using a horizontal evaluation instrument (international compared analysis). Compared items were divided in four dimensions: 1. curriculum structure—subjects, timetable, compulsory, ratio, etc., 2. educational methodologies—project-based learning, research, practical lessons-, 3. Objectives and evaluation—aims, evaluation criteria, standards-, and 4. Contents—conceptual, procedural, and attitudinal. The results show that, despite a different structure for the history and geography subjects in Primary Education, neither of the two curricula present historical and geographical thinking concepts as a fundamental aim for Primary Education and, at the same time, the low presence of these thinking concepts is linked to traditional teaching models still based on positivism and memorization.

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Introduction

The Social Sciences, including History and Geography, have been school subjects since the first attempts to create a national educational system in all “western” societies at the beginning of the nineteenth century. The target for Social Science education has evolved as the societies developed themselves: first, both History and Geography, had the goal of building the new modern nations and to justify the state-center power that they created. Actually, Social Science education must fill a very different gap, as History and Geography have the target to explain the contemporary society, how it has evolved, what problems it faces and the relations between people, nature, and social environment. As Prats and Santacana (2001) has told, Social Studies teach students the society they live in and how to behave to become good citizens in the future.

In this sense, this investigation¹ refers to compare how national curriculum in Spain and in Sweden develop new skills through the concepts of historical and geographical thinking. The comparative study will be held, in this research, using the application AQUAD 7 to make a qualitative analysis through an ad hoc instrument created for both Swedish and Spanish national curricula.

Developing concepts of historical and geographical thinking will help, in the future, students in these countries to understand complex processes as the rising of political populism, sustainability, gender equality, climate change, refugees and migrations or the understanding of difficult and recurring moments as wars or economic crisis.

Spanish and Swedish educational curriculum. National curriculum is an educative document, the purpose of which must be to structure all the teaching-learning processes and help teachers to establish realistic targets, contents and evaluation criteria base on the psychological development of the students. However, instead of that, national curriculum is usually a political weapon, the destination of which is to take the control of the agenda to produce a particular kind of society (Crawford, 1995).

From nineteenth century onwards the main political target in national curriculum all over the world was to generate recognizable national identities to support the idea and structure of the new states founded after the fall of old regimes (Peterson et al., 2016). The Spanish and Swedish cases fit perfectly in these national purposes just as countries like the USA or the United Kingdom (González-Delgado, 2013). Education had to legitimize the power of monarchies living together with new citizen rights, assembly representations and political parties heading voted governments. In order to reach this goal, most of the national curricula in the nineteenth century and early twentieth century used history education to create this new national identity between citizens (McKiernan, 1993).

As Nygren (2011) explains history education in Sweden had a great evolution between 1927 and 1961. From a more nationalistic view of history to an international understanding of historical processes based on the recommendations made from the League of Nations first, UNESCO and, lastly, the European Council.

The period of the inter wars and the creation of European institutions revealed a rising preoccupation for historical knowledge in the Swedish national education policy, even to consider History a new core subject in upper secondary schools in a Parliamentary decision (Elgström and Hellstenius, 2010). It is important to remark that, in the Swedish context, teaching the Holocaust and other genocides is emphasized when teaching history (Ammert, 2015). There is, in Sweden, a public committee to develop the work about tolerance, democracy and human

rights: *The living history forum* (Karlsson, 2000). Still, Alvé (2017), has showed that it is hard for the teachers to let the students think critically with the help of history. There is still a big story about Sweden's history the teachers want the students to accept.

The contemporary focus for History and Geography education, among Swedish teachers and researchers, are now center in how developing contents through competences (Nygren, 2012), peace and democratic values (Elmersjö, 2014), knowledge about invisible and indigenous people (Nygren, 2016), geographical skills (Örbring, 2017) or how to assess competences through national tests and other assessments (Alvé, 2011; Eliasson et al., 2015).

At the same time, the evolution of Spanish curriculum related to Social Sciences education is still very limited. Until 1975 the country run under the dictatorship of General Franco so there was not an educational debate on the table: history education under Franco's government was focused on the “glorious” days of Spain in history: Empire in the Modern era, Spain as the head of Roman Christianity, America's discover, sending off the Muslims in the Middle Ages or the independence war during the Napoleonic empire.

Still during the 80s and 90s of the last century it was very difficult to find an educational debate about democratic values for history teaching in Spain. Sabido-Codina and Albert (2020) highlight that genocides or the Holocaust were invisible topics in Spanish history education for decades (González, 2015). Even, the crimes and deaths in the Spanish Civil War (1936–39) and post-war are still invisible topics and a problematic discussion to be held in the classrooms (Arias et al., 2019).

In this sense, the presence of concepts for historical or geographical thinking in the Spanish curriculum is a recent debate among researchers. As Gómez-Carrasco et al. (2019) remark, Spanish history education is still linked to national narratives and positivism, even in national tests and assessments (Gómez-Carrasco et al., 2018).

In the last years, researchers are making a big effort in Social Sciences education to develop new topics and subjects (Prats and Santacana, 2001; Estepa, 2017) as for example heritage education (Cuenca et al., 2017; Fontal et al., 2017), citizenship and democratic values (Pagès, 2019; Santisteban and Pagès, 2007), relevant social problems (López-Facal, 2011; Moreno-Vera, 2018), gender equality (Díaz de Bedmar and Fernández Valencia, 2019; Moreno-Vera and Díez-Ros, 2017) or new methodologies to teach History (Gómez-Carrasco et al., 2019, 2020) and Geography (Souto, 2013; Gómez-Trigueros and Moreno-Vera, 2017) through the TPACK model (Mishra and Koehler, 2006).

Current debates in both countries, and in all “western” countries, between democratic values as national identity and the interests of market forces influences new political discussions about developing curriculum (Whitty, 1989). In this sense, it is especially important to turn the discussions to new learning and teaching topics as the development of concepts for historical and geographical thinking, the use of practical methodologies as field work and investigation or the utilization of sources & evidences in classroom (Seixas and Morton, 2013). Such competences can help the students to face new social and global problems as the rising of political nationalism-populism, social justice, sustainability, peace, racism, gender equality or the global problems for nature, environment and climate change (Monroe et al., 2019).

The importance of learning History and Geography through thinking concepts. Social Sciences education is still very linked to traditional teaching-learning processes where students are meant

to memorize new contents, rivers, mountains, countries, battles, revolutions, kings or queens (mainly using text books and traditional narratives, Martin, 2005; Seixas, 2017). These contents, beyond being just memorized, must be put in context with today's society to emphasize their importance for the students. Sometimes, students feel that History or Geography are boring because they are not related at all to their daily life and do not explain actual problems.

Far from that feeling, Social Sciences education must link historical and geographical knowledge to the new challenges and threats that the actual society is facing (Osler and Starkey, 2005).

Research discussions about historical thinking education started in the mid-90s as heritage from Bruner's approaches (1968) to make students construct their own knowledge through investigation and practice. In that sense, Booth (1993) or Gallagher (1994) remarked that it is important to structure history contents chronologically but it was also important to learn and think with historical methods to be able to explain the causes and consequences of the facts.

In the last decades, authors have developed new models and concepts to reach a solid History education (Drake and Brown, 2003; Van Boxtel and Van Drie, 2004; Peck and Seixas, 2008; Parkes and Donnelly, 2014) and make the students understand the historical processes beyond simply memorization. Finally, Seixas and Morton (2013) resume the six big concepts for teaching history that make the students able to think historically and apply the knowledge to their daily problems: historical significance; use of evidences; continuity and change; cause and consequence; historical perspective and ethical dimension of History. Another vivid concept for historical thinking, emanated from northern Europe, has been historical consciousness (Rüsen, 2004). This concept puts light on our difficulty to understand history in an objective way. However, using right concepts, emerged from a correct use of scientific methods, will help us to make a correct interpretation of historical processes. It also put a strong demand on us to understand history from the others' perspective (Gadamer, 2006).

A similar process happened with Geographical thinking in education, but in this case, the debate started earlier when teachers and researchers understand the difficulties that spatial relations presented for the students (Graves, 1975). In fact, spatial relations between human development and economy versus preservation of natural environments attracted the attention of researchers that advance, in the last decade of the twentieth century, some of the current climate change and environment destruction problems (Mohan, 1995).

Actually, the development of geographical thinking skills is a popular topic from secondary to higher education (Karkdijk et al., 2013) as they help students to improve and to overcome the mere description of Geography (Araya and Cavalcanti, 2018). The concepts of geographical thinking can be resumed as: localization, spatial relations, causality and evolution (Brooks et al., 2017). Even a concept of moral dimension is mentioned among researchers today (Molin and Grubbström, 2013).

The importance of teaching-learning through concepts of historical and geographical thinking is due to the new educational windows they allow to open: developing new methodologies for Social Science education as global projects, understanding complex processes instead of memorizing data, connecting school knowledge to the daily life, promoting field work, cooperation and investigation in Social Sciences lessons and facing, from schools, relevant social problems as wars, political populisms, refugees, climate change, economic crisis, mass tourism, environment destruction, pollution, migrations, heritage preservation, poverty or under developed societies.

Methods

Aims and research question. When starting this investigation, we established the research question: are concepts for historical and geographical thinking present in national curricula of Sweden and Spain?

Related to that question, the main target of this study is to compare the presence of competences for historical and geographical thinking in the Social Sciences development of Spanish and Swedish national curriculum for Primary Education.

To reach this goal we structure this compared study in four specific sub-objectives:

- S.O. 1: To analyze the structure and general features of Spanish and Swedish national curriculum: compulsory, structure, reviewable, subsequent development, timetables, student ratio, key competences, disability & adaptations and reading promotion plan.
- S.O. 2: To compare methodological strategies and learning procedures applied to Social Sciences: general methodologies, Project-based learning, practical sessions and research lessons.
- S.O. 3: To study specific Social Sciences objectives and evaluation criteria to understand the purposes of historical and geographical education: specific objectives, evaluation criteria, standards, evaluation strategies and instruments.
- S.O. 4: To remark Social Sciences contents in both curricula: conceptual contents, procedural contents and attitudinal contents.

Context. The countries selected in this study were Spain and Sweden, two similar countries attending to social stability, solid public education system, economic development and political belonging to the EU.

In addition to this geographical and political neighborhood, both countries score similar in Science tests in the two last Programme for International Student Assessment (PISA) reports known: 2015 and 2018, where they are surrounding the Organization for Economic Cooperation and Development (OECD) average score, as we can see in the table below (Table 1).

Although Sweden remarkably improved its results in the last PISA report and Spain, at the same time, got worse, it is important to highlight that the "Science" test is a collection of questions and problems not only related to Social Studies, if not, also linked to environmental and biological topics or physics and technology subjects. In that sense, these results do not mean, necessarily, a better or worse geographical or historical education.

Research analysis procedure and instrument validation. In order to reach the objectives previously proposed, to analyze the curriculum structure (S.O.1), methodological approaches (S.O.2), evaluation (S.O.3), and contents (S.O.4) the researchers designed a qualitative instrument: a comparing table to analyze both countries (Table 2).

This instrument was an "evaluation table", valid for both single countries and containing the comparison of the four objectives,

Table 1 Science score per country and OECD average in the two last PISA reports.

	PISA 2015	OECD average	PISA 2018	OECD average
Spain	493	493	483	489
Sweden	493		499	

Source: <http://www.oecd.org/pisa>.

Table 2 Evaluation table instrument.

Dimension	Comments					
	Yes	No	Spain	Yes	No	Sweden
Presence						
Structure and general features						
1. Compulsory						
2. Recommended						
3. Reviewable						
4. Social Sciences structure						
5. Weekly timetable						
6. Subsequent curriculum development						
7. Student ratio						
8. Key competences						
9. Disabled adaptations						
10. Reading promotion plans						
Methodological strategies						
11. Methodological strategies						
12. Project-based learning						
13. Practical sessions						
14. Research sessions						
Objectives and evaluation						
15. Social Sciences specific objectives						
16. Historical and Geographical thinking concepts						
17. Evaluation standard level 1 (reproduction)						
18. Evaluation standards level 2 (Comprehension)						
19. Evaluation standards level 3 (Application)						
20. Evaluation strategies and instruments						
Contents						
21. Contents						

Source: own elaboration DICS019 (Social Science Research Group, University of Murcia).

already mentioned. It contains several related items to study the presence or not of the variables, evaluating the development grade in the case the item is included in the curriculum.

The investigation methodology required in this study was a qualitative analysis of the items that show the presence of the concepts of geographical and historical thinking in both national curricula. To complete this research, investigators used the qualitative analysis application AQUAD 7 (Huber, 2013) and conducted an analysis to identify the presence of thinking concepts in the curriculum (Supplementary File). We coded and analyzed the data collection from the evaluation table into items and all codes were structured to systematically examine data content. This kind of tool-based approach allowed us to analyze the results multi-dimensionally detailing specific data linked to the four specific objectives.

To evaluate and validate the instrument designed, we organized an expert session in which we presented the evaluation table up to 12 researchers ($n = 12$): four of them experts in educative research methodology (quantitative and qualitative) and the other eight investigators experts in Social Sciences Education. Participants were asked to rate (Likert scale 1 to 5) each item and to propose ulterior changes in the instrument.

The validation result showed a solid construction of the instrument. We use SPSS 24 statistical package to test the reliability of the validation questionnaire, Likert scale model, and it obtained 0.89 using Cronbach's Alpha test (Table 3). This validation procedure has also been used in other educational investigations as Gestsdóttir et al. (2018) and the criterion for a

Table 3 Cronbach's Alpha validation test.

Scale	Cronbach's Alpha value
Reliability	0.89

Source: own elaboration.

well-established evaluation instrument and a solid construction is between 0.70 and 0.90, what indicates that the instrument used in this research has a good internal consistency and is significant.

Results and discussion

The analysis made revealed qualitative data from both national curricula of Spain and Sweden. In the Spanish case, we analyzed the last Royal Decree approved by the Parliament: The "Royal Decree 126/2014 for Primary Education²". This is the valid national law today, although it is important to note that this Royal Decree is, then, developed by Autonomies (Spanish Regions with administrative competences) to specify subjects as the "second language" for autonomies with regional language as Catalonia, Basque Country or Galicia.

In the case of Sweden, we analyzed the last and valid national Curriculum for Primary Education: "Curriculum for the compulsory school, preschool class and school-age educare", approved in 2011 but revised for the last time in 2018³.

In the Table 4 we can observe the qualitative analysis made using the evaluation instrument, previously validated:

Structure and general features results. In order to make a coherent analysis of the data emerged, we are going to discuss the results in the same order that we establish the sub-objectives and aims.

In relation to the structure and general features for both national curricula for Primary Education, it is important to remark that in Spain and Sweden we find a compulsory curriculum for Primary Education (in Spain, it has been analyzed the 6th grade and in Sweden the years 4–6). In the Swedish case, the curriculum approved is reviewable, fact that does not happen in the Spanish case, where any modification of the national curriculum supposes the construction of a new curriculum and the need of being approved by Parliament, entering in the political debate, which reduces educational flexibility and decrease the options to have a curriculum rapidly adapted to novelties and innovations (Estepa, 2017).

Another important difference is the structure of the Social Science subject: in Spain, for Primary Education, there is a subject called Social Sciences, where we can observe contents from Geography and History together, although they are treated juxtaposed as Geography and History have their own contents and evaluation criteria. Sweden, instead, structure the Social Sciences in two different subjects: Geography and History, both with its own aims, tasks, contents and evaluation.

The rest of items analyzed present a similar treatment in both curricula. Spain and Sweden pay attention to develop tasks or key competences, as transversal contents in all the subjects proposed. Neither Spain nor Sweden define clearly a weekly timetable for the subjects. There is not defined a student ratio for classrooms, which could be very helpful, as it allows to establish low-ratio lessons for research, practices or field work in Social Sciences.

In the case of Spain, the Royal Decree 126/2014 pay attention to items as "disability" or the development of a general reading plan for Primary Education students, but it is surprising that it does not define any concrete measure to its implementation in the subject of Social Science.

Table 4 Comparative study by countries.

Dimension	Comments			
	Spain	Yes	No	Sweden
Presence				
Structure and general features				
1. Compulsory	Compulsory curriculum approved by the parliament in the law LOMCE/2014. Development for Primary Education by Royal Decree 126/2014 and by Regional Decrees in each Autonomous Region.	X		Approved by government the Curriculum for the compulsory school, preschool class and school-age <i>Educare</i>
2. Recommended			X	
3. Reviewable	No, it could be specified by concrete orders (Ministry and Counselors)	X		Yes, reviewable and modifiable. In this case, approved in 2011 and reviewed in 2018.
4. Social Sciences structure	Social Sciences subject: History and Geography together. Defined by curriculum as compulsory.	X		Separated. Geography subject and History subject
5. Weekly timetable	Not defined. It said that all compulsory subjects together must have 50% of total timetable		X	Undefined
6. Subsequent curriculum development	Regional decrees and specific orders	X		No development
7. Student ratio	Not defined maximum or minimum ratio and classroom composition		X	Not defined maximum or minimum ratio but there is an invitation to create a good classroom climate through space and resources
8. Key competences	7 EU key competences cited in article 2.2 but not in Social Sciences subject	X		Yes, cited as general task to develop during all the education system
9. Disabled adaptations	They appear in Article 14 but no measurements materialize in concrete actions	X		All who work in the school should be observant of and support pupils in need of extra adaptations or special support
10. Reading promotion plans	Although there is no "Reading promotion Plan", it appears as one of the general principles for Primary Education (Article 7)		X	Teachers should take into account each individual's needs, circumstances, experiences and thinking
Methodological strategies				
11. Methodological strategies	Article 2.1 define what is "methodology" but does not recommend any	X		Not recommended a particular methodology but it is important to use field work
12. Project-based learning	Undefined	X		Undefined
13. Practical sessions	Undefined	X		Undefined
14. Research sessions	Undefined	X		Undefined
Objectives and evaluation				
15. Social Sciences specific objectives	General objectives for Primary Education, but not defined objectives for Social Sciences	X		Defined 4 aims for history and 4 aims for Geography
16. Historical and Geographical thinking concepts	Undefined	X		What the following concepts mean - change, similarities and differences, chronology, cause and consequence, sources and interpretation, and how they are used in historical contexts. (History core content 4-6)
				Spatial understanding (Geography core content 1-3)

Table 4 (continued)

Dimension		Comments			
Presence		Yes	No	Spain	Sweden
17. Evaluation standard level 1 (reproduction)		X		64 reproduction standards	No standards
18. Evaluation standards level 2 (Comprehension)		X		12 compression standards	No standards
19. Evaluation standards level 3 (Application)		X		20 application standards	No standards
20. Evaluation strategies and instruments			X	In the Decree, Article 12 is for evaluation but there is not concreted evaluation strategies or instruments Generally, it is said that it will be global and continuous with two stages test in 3 rd and 6 th year Regarding to the evaluation in Social Sciences, there are minimum evaluation criteria and they are specified by evaluation standards There are not evaluation strategies or instruments for Social Sciences	Specific knowledge requirements for 4-6 years. 3 evaluation criteria for history and 3 criteria for geography, highlighting qualifications (A-E) in each of the 3 criteria
Contents					
21. Contents	X			Unambiguous and close conceptual contents. Social Science structure in 4 topics: 1. Common contents 2. The world where we live (physical geography) 3. Living in society (human geography) 4. Time footprints (history) The contents are just name and not divided between conceptual, procedural and attitudinal contents	Core content in each subject: Geography and History (years 4-6) They are just named, close and unambiguous

Source: own elaboration DCSO (Social Science Didactics Research Group, University of Murcia) 2019.

Methodological strategies. One of the most important differences between national curricula of Spain and Sweden emerge from the analysis of the methodological strategies proposed by the educational law.

In fact, the lack of concepts of historical and geographical thinking is evident in these items as the curriculum does not propose concrete methodologies for the Social Sciences subjects. Something that drew our attention as they are subjects with a very particular way to construct themselves: investigation, use of sources, field work, etc. what would require concrete proposals for a correct educational treatment.

Although Spanish curriculum have a single article (Article 2.1) for methodologies defining what this concept means, it does not recommend any particular strategy for Primary Education. Even, there are no specific recommendations for Social Science as subject.

Sweden, instead, does not develop an article for didactic methodologies, but there is a coherent recommendation in the subject of Geography when curriculum highlights the importance of using field work as a significant methodology. At least, using field work, Swedish students can observe environment, physical and human evolution and the relations between physical and human Geography (Araya and Cavalcanti, 2018), which permits to work three of the Geographical thinking concepts: localization, evolution and spatial relations (Brooks et al., 2017).

The lack of methodological proposals in both curricula supposes an important limitation for developing concepts of historical and geographical thinking, as it opens the door to continue teaching through traditional models with lectures, text books and memorization. In this sense, we do not find any methodological proposal around Project-based learning, which can improve thinking conceptions as work on relations (geographical thinking concepts) between different knowledge, Research lessons (Prats and Santacana, 2001) that can improve the use of evidences and sources by students and allow to work concepts as causality, consequences, evolution, change and continuity (Historical and Geographical thinking) or Practical sessions to apply the theoretical knowledge into service-learning actions (itineraries or field work as Cuenca et al., 2017 recommend) that help to develop concepts as historical perspective, significance or the ethical dimension of History (Seixas and Morton, 2013).

Objectives and evaluation. Related to the aims and evaluation criteria, two dimensions narrowly linked as they are the start and goal of the teaching-learning process, we can also observe that in both curricula the concepts of Historical and Geographical thinking do not appear named, cited or explained, so they do not ground a proper target for Social Sciences subjects during Primary Education.

Analyzing the aims, we would like to highlight the lack of Social Science aims in the Spanish Royal Decree. There are only "General Objectives" for the whole period of Primary Education, some of them related to Social Studies, but there are not specific aims in the subject of Social Science. Despite of that, evaluation criteria and evaluation standards are well developed and they are very concrete. It is remarkable the high number of evaluation standards that conditions teacher's labor as they are obliged to evaluate all standards during the lessons. That makes the Spanish educational curriculum more worried about evaluate results than student's learning process and outcomes.

In addition, a qualitative analysis of these Spanish evaluation standards shows that most of them (64 just for Social Science) are related to the mere reproduction, which means that curriculum encourage memorization activities and its evaluation. Just

12 standards in Social Science are linked to knowledge compression and 20 standards refer to practical application that, according to Bloom's Taxonomy (Larkin and Burton, 2008) is where the concepts of historical and geographical thinking could appear.

On the other hand, the case of Swedish curriculum is quite different as the aims and evaluation criteria are coherent and have a clear alignment. In fact, there is a good reciprocation between aims and evaluation, showing a realistic and reachable number of them, omitting evaluation standards to establish clear starting and arriving points for the teaching-learning process.

Contents. Regarding to the qualitative analysis of the contents, they are similar in Spain and Sweden. We observe, concretely, that the most developed contents for Primary Education appear in Spain in the 6th grade (according to the Royal Decree 126/2014) and in years 4–6 in the case of Swedish compulsory curriculum.

Neither curricula distinguish between conceptual, procedural and attitudinal contents, although in the Spanish case procedural and attitudinal contents are easily pointed as there is a dimension named as "1. Common Contents" in Social Sciences, valid for History and Geography, where appears contents as the use of maps, sources, investigation or respect in cooperative work (Estepa, 2017).

Conceptual contents are divided in three more dimensions: "2. The world where we live" refers to physical Geography and environment, "3. Living in society" refers to human Geography, economy, policy and demography, and, lastly "4. Time footprints" linked to History education and heritage.

The Swedish curriculum for 4–6 years talks of "Core contents", both in Geography and in History education, and refers only to conceptual contents (Elgström and Hellstenius, 2010). Obviously, due to the separated structure of Social Sciences, the curriculum shows different core contents for Geography and History subjects, not being linked to each other as some authors recommend to reach a good historical and geographical thinking learning (Gómez-Carrasco et al., 2018) and a correct cognitive development (Bruner, 1968).

Conclusions

The main objective of this study was to identify the presence of concepts for historical and geographical thinking comparing the national curricula of Spain and Sweden, two countries with similar educational conditions: a solid public system, developed economy and similar scores in the last PISA reports, close to the OECD average.

To reach this target, we designed and validated (0.89 Cronbach's Alpha value) an evaluation table instrument. Four dimensions and their corresponding items has been established according to the sub-objectives proposed for a qualitative analysis of data (AQUAD 7, Huber, 2013): 1. Structure and general features, 2. Methodological strategies, 3. Aims and evaluation criteria and, finally, 4. Contents.

In relation to the S.O. 1 about the structure and general features, it is important to note that, in both countries, curricula are compulsory, but only in Sweden is reviewable what allow to introduce minor innovations and educational modifications avoiding long and sterile political debates. The structure of the subjects, History and Geography together in Spain and separated in Sweden, does not suppose a relevant difference, as each subject has its own aims, contents and evaluation criteria, as we saw in the analysis of results.

The analysis of methodological strategies, S.O. 2, and aims & evaluation criteria, S.O. 3, shows the lack of concepts of historical

and geographical thinking in both curricula. Regarding to the didactic methods, the Swedish curriculum recommends the use of field work as strategy when teaching Geography. It is the only concrete methodology to learn Social Studies that implies to think geographically using its key concepts: localization, evolution, causality, and spatial relations. Other active methodologies as Project-based learning, research and investigation (Prats and Santacana, 2001) or practical lessons are not mentioned neither in the Spanish Royal Decree nor in the Swedish compulsory curriculum for Primary Education. These active learning methodologies (Gómez-Carrasco et al., 2019) allow to work more flexibly with thinking concepts as, for example, the use of evidences or sources, historical significance or ethical dimension (Seixas and Morton, 2013; Eliasson et al., 2015).

In fact, analyzing the data emerged in this investigation about concepts for geographical and historical thinking, it is important to note that just the Swedish curriculum attends to “change, similarities and differences, chronology, cause and consequence, sources and interpretation, and how they are used in historical contexts” (History core content 4–6) and “Spatial understanding” (Geography core content 1–3) as learning contents for the students. On the other hand, the Spanish curriculum does not have any specific content related directly with concepts of historical or geographical thinking.

Comparing these results from Sweden and Spain to other curricula from European countries as England or the Netherlands, literature shows that the incidence of concepts for historical and geographical thinking varied widely in each country. In the case of England, historical thinking concepts are more developed (Wyse and Ferrari, 2015) but as Hodgkinson (2004) highlights, in the English National Curriculum (NC) the development of historical time concepts “is confused and would seem to be based upon little, if any, empirical findings”.

In the Netherlands, investigations about the Dutch curriculum for Primary Education and teaching processes shows that the historical time concepts are not completely developed by teachers during the lessons and, in fact, history is not taught emphasizing thinking concepts, if not, taught chronologically, being necessary an improvement as De Groot-Reuvekamp et al. (2014) comment.

According to the compared analysis, between Spain and Sweden, of aims and evaluation criteria (S.O. 3), it is important to highlight that reaching concepts of historical and geographical thinking is not a target in the curricula studied. It draws attention that Spanish curriculum does not establish concrete Social Sciences objectives and, instead of that, have a very developed evaluation system through criteria and standards, most of them related to the mere reproduction and memorization according to Bloom’s Taxonomy (Larkin and Burton, 2008). In this sense, the Swedish curriculum show a coherent relation between aims and evaluation criteria, that appear clearly explained and reachable for students.

Finally, corresponding to the analysis of contents, the S.O. 4 of this study, both national curricula present closed and unambiguous conceptual contents. On one hand, the Swedish case talks about “core contents” for Geography and History (Elgström and Hellstenius, 2010), on the other hand, the Spanish curriculum divides the Social Sciences contents in “Common contents” for procedural and attitudinal contents, “The world where we live” for physical Geography, “Living in society” for human Geography and “Time footprints” for historical education.

The low presence of concepts for historical and geographical thinking in national curricula of Spain and Sweden has to do with the survival of traditional teaching models and limited methodologies in Social Science education. Also, the aims and evaluation criteria are still related to mere reproduction and memorization, especially in the Spanish case, so it would be

beneficial, in the future, to implement a coherent relation between aims, contents, flexible methodologies to work Social Sciences and evaluation criteria centered in applied knowledge.

Data availability

The original qualitative analysis of both curricula can be visited in Harvard Dataverse: <https://doi.org/10.7910/DVN/O3PDMW>

Received: 23 July 2020; Accepted: 11 September 2020;

Published online: 28 September 2020

Notes

- 1 This research is part of the the project 20874/PI/18 “El pensamiento geográfico e histórico del alumnado de educación primaria en la Región de Murcia: propuesta metodológica innovadora para una educación de calidad” funded by Seneca Foundation in the program: “Ayudas a la realización de proyectos para el desarrollo de investigación científica y técnica por grupos competitivos (plan de actuación 2019).
- 2 In 2020, Spanish government started the process to approve a new national curriculum: LOMLOE. If approved, there will be a new Royal Decree for Primary Education.
- 3 A new revision has started, and will end with new knowledge requirements—contents, objectives and evaluation standards—to help teachers assessing their students. These will be implemented from 2021.

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Acknowledgements

Thanks to the funding institution “Fundación Séneca” and principal investigator of the project (20874/PI/18) Pedro Miralles Martínez. Special mention to participants in the expert group for validate the instrument: Prof. Molina Saorín, Prof. Vallejo, Prof. Villara-Arocena, Prof. Guerrero, Prof. Trigueros, Prof. Sánchez Ibáñez, Prof. Miralles, Prof. Campillo, Prof. Escribano-Miralles, Prof. López-García, Prof. Zaragoza-Vidal and Prof. Monteagudo.

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Competing interests

The authors declare no competing interests.

Additional information

Supplementary information is available for this paper at <https://doi.org/10.1057/s41599-020-00601-z>.

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