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# Entrepreneurship Education: A Systematic Literature Review and Identification of an Existing Gap in the Field

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Abstract: Having identified the need to conduct research on the intersection between entrepreneurship education (EE) and public policies, we carried out a systematic literature review on decision-making processes regarding the implementation of education for entrepreneurship programs in schools and the introduction of this topic in the policy-making process. This SLR followed every process inherent to its well-established protocol. The research undertaken confirmed that the understanding of decision processes associated with the implementation of EE programs is not only a "missing link" in the discussions about the way in which countries manage situations related to EE, but also a gap in academic knowledge. Indeed, the SLR process included only nine articles in the final review (obtained through a methodology based on an algorithm)—which is a clear sign that further scientific research around this specific topic is needed. The articles included in the final review suggest that: (i) entrepreneurship is fundamental to the progress and evolution of countries and their regions, (ii) there is evidence that EE is central to a more entrepreneurial youth, and (iii) the successful implementation of recommendations from regulatory institutions is based on political commitment and implementation capacities.

**Keywords:** entrepreneurship education; public policy process; decision-making processes; integrated policy-making process framework; systematic literature review

#### 1. Introduction

The term and topics related to entrepreneurship gained popularity in academia and in the business/economic world in the first half of the 20th century, namely in the seminal works of Joseph Schumpeter [1]. More recently, the field has seen an ever-increasing expansion. It has been studied from many cross-disciplinary perspectives and associated with a broader spectrum of topics, such as education, economic development, and politics [2]. Today, entrepreneurship-related skills are acknowledged as crucial for the development of all types of businesses and as catalysts for the fourth industrial revolution [1]. Thus, new businesses or small businesses looking for international expansion require people with soft skills (rather than with new tools or hard skills) and a focus on personal development to grow and expand. The preponderant way of achieving this is through entrepreneurship education (EE).

As Pittaway and Cope identified in a 2007 article published in the *International Small Business Journal*, there is a gap in the role of policy-based research concerning EE, as well as in studies concerning its dissemination. As the two authors put it:

"While significant work has been carried out on institutional policies and strategies towards entrepreneurship education not enough of the studies highlighted in this systematic review focused on the role of regional, national or supra-national education policy. Importantly, the link between wider national policies and institutional strategies did not appear to be particularly well developed in the empirical base". [3]



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We add to the literature by revisiting this problem one decade and a half after Pittaway and Cope. We focused on the same subject and found the same specific gap (which, as we will see, still exists). However, we carried out this SLR to reassess the presence of literature that will help further research about this specific topic inside the vast EE field.

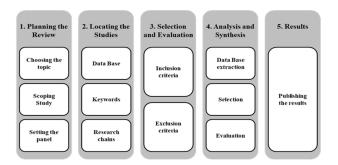
Indeed, as part of a recent study focused on understanding the decision process associated with the implementation of Entrepreneurship Education Programs (EEP) in compulsory education, a set of critical goals and objectives were identified. One of these goals was to undertake a detailed systematic literature review that would (i) allow a better analysis and understanding of the phenomenon of entrepreneurship education (EE) and (ii) contribute to the identification and refinement of the research issues: namely (i) the connection between entrepreneurship and economic and social development; (ii) EE and its implementation in middle and high schools (both in Portugal and in the remaining countries of the European Union); (iii) the use of theoretical referentials associated with the study of public policy, particularly John Kingdon's Multiple Streams Framework (1984), to explain the scheduling processes and political decisions regarding whether or not to implement the aforementioned programs.

In a recent paper, Fellnhofer [4] mentioned that "the retrospective amount of research literature dedicated to entrepreneurship education (EE) is overwhelming". In her study, Fellnhofer used cluster techniques and bibliometric mapping to help navigate and visualize the main themes related to EE. As mentioned, the SLR we are about to present is part of a broader research project on management and social sciences linked to entrepreneurship and public policies. Using a methodology close to an SLR, Fellnhofer did include this kind of research in her Cluster 1, entitled "social and policy-driven EE research". Yet, however insightful her conclusions may be, the approach only scratched the surface of the matter we have at hand and comprised such an array of topics that the scope ended up being too broad. After all, it only identified and analyzed one of eight clusters.

Other literature reviews (some of which use the SLR methodology as well) also acknowledge [5–7] or suggest the need to further explore the existing bibliography (and eventually expand it) in the realm of public policies concerning EE [3,8,9]. Many of these reviews look at EE from a variety of interesting angles. However, while some of these deserve to be updated (such as that of Pittaway and Cope), others are not fully aligned with our approach or tackle it only superficially (or a combination of the three situations). Here, we propose to follow Fellnhofer's footsteps (as well as Pittaway and Cope's) and continue an in-depth exploration of the literature in the intersection between EE and public policies.

## 2. Materials and Methods

Our SLR process closely followed the method proposed by Denyer and Tranfield [10], which consists in a pre-established protocol that assumes five different stages: (i) review planning, (ii) establishing study limits, (iii) selection and evaluation of the inclusion and exclusion criteria, (iv) critical analysis and overview of the gathered data, and (v) (eventual) publishing of the obtained results. It should be noted that the SLR protocol is intended to minimize the human element (and therefore subjectivity). Figure 1 illustrates the sequence of these steps:



**Figure 1.** Stages of the systematic literature review.

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## 2.1. Review Planning: Scoping Study

This SLR started by presenting a literature scoping study. This was based on entrepreneurship, entrepreneurship education, and public policies analysis. Next, we present the summary of the set of works taken into consideration at this stage.

## 2.1.1. Entrepreneurship and Economic Development of Countries and Regions

Entrepreneurship has been explored in several technical studies and research works all over the world. These state how entrepreneurship is important to economic growth and development in countries and regions [11–21]. Some authors and studies even argue that entrepreneurship is seen as an economic driver [22–25], creating new enterprises and allowing economic development [23,26–29].

In Europe, public policies on entrepreneurship have garnered particular attention from European entities, as proven by the Action Plan "Entrepreneurship 2020", in which it is recognized that: "Entrepreneurship is a powerful driver of economic growth and job creation: it creates new companies and jobs, opens up new markets, and nurtures new skills and capabilities." [30]. However, the scenario in 2018, according to the European institutions (which issued recommendation after recommendation to move EE forward in Europe), was that "the lack of entrepreneurship education remains a significant bottleneck to stimulating self-employment and entrepreneurship in the EU" [31]. The European Commission considers interventions in three areas, which have guided policies up to now:

This Action Plan is a blueprint for decisive joint action to unleash Europe's entrepreneurial potential, to remove existing obstacles, and to revolutionize the culture of entrepreneurship in Europe. It aims to ease the creation of new businesses and to create a much more supportive environment for existing entrepreneurs to thrive and grow. It proposes three areas for immediate intervention: (i) entrepreneurial education and training to support growth and business creation; (ii) strengthening framework conditions for entrepreneurs by removing existing structural barriers and supporting them in crucial phases of the business lifecycle; (iii) fostering the culture of entrepreneurship in Europe by nurturing the new generation of entrepreneurs. Entrepreneurship has also been established as a key competence for lifelong learning since 2006, through Recommendation of the European Parliament and of the Council of 18 December 2006 (2006/962/EC) [32]. In 2018, in was revalidated as a key competence in an updated version of the key competences for lifelong learning [30].

In addition to the consensus about the palpable impact of entrepreneurship in society, it is also acknowledged that entrepreneurship is connected to innovation and creation of value—much beyond simple subsistence; it is critical to structure and support an enabling environment to generate that value [33]. This challenge is extremely demanding, as it requires vision, an open mind, courage, and the capacity for complex decision taking. It is in this context that new ideas arise, leading to innovative solutions. In turn, these solutions contribute to the development of markets and businesses, which generate jobs, increase tax revenue, and make countries (and regions) more competitive [34,35].

It should be noted that the Council on Competitiveness [36] states that the success of competitiveness in the USA is due to its "entrepreneurial economy" and that the country's leadership in this domain results from these key factors: quick and easy access to capital and state of the art research; a culture that enables risk and experiences; and a legal framework that encourages start-up creation and entrance in new markets and, at the same time, facilitates the exit of less productive companies.

In this context, the importance of creating and sustaining entrepreneurial ecosystems is stated and valued [37]. The term "Entrepreneurial Ecosystem" describes the way individuals, enterprises, and governments interact to influence the development of entrepreneurs and enterprises at local, regional, and national levels [38,39].

In terms of conceptualization, the model presented by Isenberg [40] has been widely adopted by several academics and political and business leaders. Developed in Babson College, the model defends a holistic approach to building entrepreneurial ecosystems, due

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to several variables that influence these systems and the complex relationships existing between them, presenting a conceptual approach focused in six key domains: politics, finances, culture, support, human capital, and markets.

Audretsch and Keilbach [41] stated that this friendly environment for the entrepreneurial initiative contributes to generate entrepreneurial activity in a region and a country. Indeed, there is a positive relationship between ecosystems and the propensity to create companies in the regions into which they are inserted, by disseminating the economically exportable knowledge and the competitiveness improvements resulting from a higher competitiveness between their several actors.

Associated with this capacity to generate or take advantage of opportunities, we call 'entrepreneurial' those who, by their evidenced inherent qualities, are willing to take risks and engage in entrepreneurial activity. In a broader sense, these entrepreneurs are change or rupture drivers through entrepreneurial endeavors, or as Schumpeter [1] describes it, they are actors of change propelled by the desire to overcome the market/society, creating enterprises (start-ups) or new businesses/concepts within organizations (intrapreneurship) or within a social scope (social entrepreneurship).

According to Mason and Brown [37], entrepreneurship thus ends up being cross-sectional to society, showing itself mainly in the economy but also in the social, cultural, and environmental domains, supporting, in this way, Timmons' predictions [42] that "Entrepreneurship can be more important to the 21st century than the industrial revolution was to the 20th century."

## 2.1.2. Entrepreneurship and Entrepreneurship Education

According to Shane [43], the theoretical perspective used to analyze the entrepreneurial phenomenon is the base of the methodologies used for its teaching, in virtue of the ontological and epistemological suppositions underlying it.

To include entrepreneurship values and openness to innovation in the educative offering requires new models, frameworks, and paradigms. Thus, it is recommended that policy makers rethink the way the education system has been connecting the needs of a society in constant change with the transdisciplinarity and interactivity requested by the connection between these two areas. Due to this, we have perhaps reached the point where we need to rethink the old paradigm and conduct a critical "reboot" of the education system that was initiated 150 years ago in response to the Industrial Revolution, considering the subjects, the fragmented nature of the teaching, and learning through memorization. Indeed, as was previously demonstrated [44], and as Rachwal, Kurek, and Bogus [45] reiterate, the discussion around the best ways to include entrepreneurial values in school curricula is an ongoing debate in countries such as Poland that are trying to articulate traditional education with the needs of a developing economic ecosystem. Another reference, concerning Scandinavia, is a report on EE in Nordic countries [46], in which we can follow the history of the attempts at structuring the education system to harbor EE.

We should highlight the reference framework that supports entrepreneurship education, developed by Bacigalupo, Kampylis, Punie, and Van Den Brande [47] and promoted by the European Union, as a way to foster economic growth in Europe. This model, as we can see in Figure 2, presents the three different dimensions that initiatives must have to help develop entrepreneurial competences, thus helping individuals internalize a more questioning approach when looking to business opportunities, competences to complete projects, and a more evident aptitude to assume responsibilities. This model is an update of the previous European Reference Framework for Entrepreneurship Education.

In fact, policy makers, both in Europe and USA, believe that the promotion of entrepreneurship is critical to reach high levels of economic growth and innovation [48]. By the same token, according to the European institutions, as previously stated (at least since Recommendation 2006/962/EC), these same policy makers also believe that an in-

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crement in entrepreneurship can be achieved through education and, especially, through entrepreneurship education.



Figure 2. The European Entrepreneurship Competence Framework (EntreComp).

From the differentiating traits of the entrepreneur [49] to the recent approach to the entrepreneurial phenomenon as a method in which the way opportunities are set as a consequence of the actions and interactions of individuals with the external environment [50] is studied, a significant evolution in the manner of research in the entrepreneurship field was perceived.

According to the work developed by Lundstrom and Stevenson [51], it is also possible to identify a structural board of measures used worldwide by the governments of 13 countries to implement entrepreneurship education programs at the levels of middle and high school.

Thus, promoting entrepreneurship education is an area of policy intervention to which governments have increasingly been giving strategic attention, due to the role that the educational system has in promoting behavioral attitudes and in preparing teenagers for their future careers. Sirelkhatim and Gangi [7] state that "entrepreneurship education is one of the fastest growing fields of education globally", since there is a proven correlation between EE and the promise of job creation and economic development. Hence, it is not surprising that in the research on entrepreneurship education there is also an evolution in the syllabi and the adopted methodologies to focus on students' own capacity, i.e the ability to internalize the importance of shared knowledge as a resource for taking advantage of the opportunities they will be faced with [52–55].

In this sense, the Global Education Initiative, in the document created for the World Economic Forum in 2009 [56], appealed to changes in the world educational systems to help develop entrepreneurial spirit and with that support the improvement of the global economy. In this document, the institution recommended adopting 21st-century methods and tools, such as multidisciplinary approaches and interactive teaching methods to boost creativity, innovation, critical thinking, opportunity recognition, and social awareness. These traits should be involved in a strong, dynamic cooperation between governments and private entities, namely schools and companies. Evidence of ongoing interest can be found in the document from the G20 Summit in 2014 and Martín Lackéus' 2015 OECD text

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about entrepreneurship education. The link between entrepreneurship and education is seen by Lackéus [21] as a positive action field deserving of a framework with a broader perspective—not only in the strict and outdated meaning of the term as the simple creation of self-employed jobs.

Finally, we make reference to the Eurydice report [57] on "Entrepreneurship Education in European Schools". In this work, which is entirely devoted to the EE theme, a set of topics that deserve analysis by its authors are brought to the fore: (1) definition of the EE concept and specific didactic strategies; (2) possible levels of practical learning; (3) desirable employment impacts; (4) innovation strategies; (5) monitoring EEPs, pedagogical guidelines, lack of didactic and initial training material, and questions related to specific evaluation; (6) financing of this kind of education; and (7) transversability of the syllabi. However, we would like to highlight a very relevant absence in this document that is more notable than all its considerations: little or nothing is said about the weak spread and operationalization of EEPs.

## 2.1.3. Decision Processes at the Level of Public Policies

Public policies are complex and multidimensional processes that develop through several action and decision levels—local, regional, national, and transnational [5]. Indeed, public policy, in general, results from: "a set of interrelated decisions taken by a political actor or group of actors concerning the selection of goals and the means of achieving them" [58].

As Farnell, Heder, and Ljubic [59] note, at the EU level, some friendly mindsets towards implementing policies that contribute to allowing individuals to benefit from entrepreneurship teaching were promoted following the discussions in academia, especially in the behavioral field and the pedagogy of education. Regarding this matter, the European Commission published an important reference document in 2015 called "The Outward Looking School and Its Ecosystem" [60]. It supports the creation of the so-called "entrepreneurial ecosystem" in schools, based on the assumption that the school (herein referring to the levels under higher school) can be the preferred place to transfer knowledge, practices, and competences between the place of teaching and the labor world (workplace).

Thus, it is understandable that the study of the decision-making processes concerning public policy implies the use of theoretical models which allow the researcher to treat specifically the definition of government agenda and designing public policies [61,62]. Kingdon's Multiple Streams Framework (MSF), developed by himself [63,64] and then elaborated by Zahariadis [65–67], has become relevant and suitable for analyzing policy design in the beginning of the 21st century, which is considered a complex environment due to its ambiguous processes, scarcity of information, and limited decision time [12].

According to Kingdon [61], the convergence of three relatively independent processes (problems, policies, and politics) explains why some problems proceed to a decision agenda while others, though acknowledged, may not necessarily lead to an action by the government. In turn, the opening of an opportunity window is determined mainly by recognizing the problem and by the political process, after the proposals designed by experts proceed to the decision agenda. This only when the problem is recognized as such and there is a demand and a political "mood" for its solution.

Additionally, according to Kingdon [61], putting the three streams together assumes the existence and agency of "policy entrepreneurs", who are people willing to invest their resources in an idea or project, aiming at its achievement. Such entrepreneurs, experts in certain fields, with negotiating capacities and with access to policy makers, are found in governments (managers, heads of central or local administration) and in general society (opinion makers, academics, experts). Consequently, policy entrepreneurs have an essential role in linking problems to solutions, problems to political forces, and all of these to existing proposals [62].

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The MSF was used by Young et al. [68] to understand the process of training and adopting policies of support and encouragement for reading in the states of California, Michigan, and Texas (USA). They concluded that the success of implementation depends on several factors, such as: the feedback and will of parents, teachers, and lobbyists; existing data on student results; national and regional interests; and the prevailing belief that reading is a fundamental building block to the future success of learning. Only the convergence of several factors, in specific moments, allows the implementation of this kind of program.

In turn, Zerbinati and Souitaris [69] conducted an empirical study in which they identified the main decisions at a local level concerning implementing spin-offs in the European local public sector, based in ten municipalities in the United Kingdom and Italy. They concluded that, rather than international guidelines, the decisions had to consider five types of entrepreneurial actors, with a diversity of internal and external actors in autarchies. Evidencing the importance of policy entrepreneurs in decision making, this study was consistent with the premises of Kingdon's framework.

Silva and Teixeira [70] also studied local policy entrepreneurship in Portugal, concluding that "the different kinds of entrepreneurship are associated not only to the different individual traits of municipality mayors, but also, and mostly, the contextual features of regions where municipalities are located in", suggesting, in this way, the spectrum of actors and circumstances that lead to decisions.

In the field of implementing Entrepreneurship Education Programs (EEP), Leino [22] studied the case of Finland, where these programs were integrated in the curricula. The targets of their analysis were municipalities, and they considered curricula changes at a local level to try to understand the different interpretations and ways of implementing programs, concluding that schools and teachers are also key elements in the way these programs are operated.

#### 2.1.4. Establishment of Consultants' Panel

After conducting the scoping study, we established a panel of consultants to develop the SLR. According to Denyer and Tranfield [10], such a panel must be made up of people with academic knowledge and practical experience in the SLR area. In this study, these requirements were met, since 14 of the invited people were academics with experience in entrepreneurship. Additionally, the advisors of this work audited the whole process. This helped to minimize possible biases.

## 2.2. Delimitation of Scientific Studies

We set limitations for the SLR with the intention of identifying and refining the research questions. To this end, the panel's help was employed. Consultations were carried out by sending an initial proposal of pairing key words and two suggestions for the databases. We were able to obtain help from 10 of the 14 experts contacted (i.e., a response rate of 71%). This was critical to build the rationale present in this text. The cut-off date was 31 December 2016. Therefore, texts from after the end of 2016 were not included

## 2.2.1. Key Words and Research Chains

According to the abovementioned methodology, the selected key words are presented in Table 1. The selected key words were grouped in four areas: decision-making processes, decision level, educative policy, and EE. Next, eight research chains were set using Boolean logic. This grouping of key words contributed to optimizing the research and the subsequent reading of the titles and abstracts of the selected references. It should be noted, should one intend to pursue this issue further in another research project, that very small changes in the wording lead to different results. The grouping of words that supported this SLR are presented in Table 2.

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**Table 1.** Key words for SLR.

Area	Decision Process	Decision Level	<b>Education Policy</b>	Entrepreneurship Education
	Decision process	European Union	Public private partnership education	Entrepreneur * education
	Decision-mak *	European funds	New public management schools	Entrepreneur * competence
Key Words	Agenda setting	Europe 20 * 20	Politics autonomy schools	Entrepreneur ecosystem *
	Policy implementation	Europe 2007–2013	Education system	Entrepreneurship train *
	Multiple Streams Framework	Municipali * ation	Education reform	Teacher training for entrepreneurship
		Regional	Compulsory education	•
	Dalian abaian	Local	Curricular change	
	Policy choice	Portugal		
		Europe		
			Search for studies in the	
Substantiation	Research focus is understanding the decision-making processes	Different levels of policy implementation starting at transnational, national, regional, and local	education area concerning secondary policies that can influence implementing	EE-specific policy
	ī		entrepreneurship courses	

Source: created by the author.

**Table 2.** Research chains used in SLR.

Identifying Initials	Research Chain	Goal of the Research Chain
A 1	("Decision Process" OR "Decision mak *") and ("European Union" or "Portugal") AND ("Education system" OR "Education Reform") And "Compulsory Education"	Relevant studies aimed at decision-making processes in Europe or in Portugal in the area of compulsory education
A 2	("Multiple Streams Framework" OR "Agenda Setting" OR "Policy implem *" OR "Policy choice") AND ("European Funds") AND ("Public private partnership" OR "New public managem *" OR "politics autonomy" OR "curricular change") AND ("Compulsory Education")	Relevant studies aimed at identifying policy processes related to applying European funds to change the management and autonomy of schools
A 3	("Multiple Streams Framework") And ("Municipal" OR "Regional" OR "Local") AND ("European Funds")	Relevant studies aimed at identifying the use of Kingdon's framework applied to local or regional policy using European funds
A 4	("Decision Process" OR "Decision mak *") AND ("European Funds") AND ("Entrepreneur * Education" OR "Entrepreneur * Competence" OR "Entrepreneur * Ecosystem" OR "Entrepreneurship train *" OR "Teacher training")	Relevant studies related to decision-making processes for the use of European funds in the area of EE or underlying areas
A 5	("Multiple Streams Framework") AND ("Municipal" OR "Regional" OR "Local") AND ("Compulsory Education") AND ("Entrepreneur * Education")	Relevant studies aimed at identifying the use of Kingdon's framework applied to local or regional education policy in the area of EE
A 6	("Multiple Streams Framework") AND ("Municipal" OR "Regional" OR "Local") AND ("European Fund" OR "Europe 20 * 20" OR "Europe 2007–2013") AND ("Compulsory Education") AND ("Entrepreneur * Education")	Relevant studies aimed at identifying the use of Kingdon's framework applied to local or regional education policy in the area of EE using European funds
A 7	"Entrepreneur * education" AND ("policy process" OR "policy implement *" OR "multiple streams") AND ("primary education" OR "secondary education" Or "Professional Education") AND ("Europe" OR "Portugal")	Relevant studies aimed at identifying decision-making processes in compulsory education in Europe or Portugal
A 8	"decision process" AND ("Entrepreneur * education" OR "Entrepreneur * Ecosystem")	Relevant studies that identify works about decision-making processes concerning entrepreneurial initiatives

Source: created by the author.

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#### 2.2.2. Database

In addition to the online Knowledge Library B-ON, the following databases were also used: EBSCO, Web of Science, Google Scholar, and SSRN (Social Science Research Network). It should be highlighted that the research chains were input into the applications that supported the aforementioned databases. They were used as a filter so that the results were reviewed in pairs and written in English.

Furthermore, The International Journal of Management Education, Review of Educational Research, Sociology of Education, International Journal of Public Policy, European Economic Review, Journal of Experimental Education, Review of Policy Research, Theories of the Policy Process, and Journal of European Public Policy were also surveyed. These magazines and their respective platforms were considered suited to the research. At the request of the panel, the following journals were also considered: Entrepreneurship & Regional Development—An International Journal; Journal of Business Venturing; Journal of Entrepreneurship Business and Economics; Journal of Economic Surveys; Entrepreneurship Research Journal; and Journal of Small Business & Entrepreneurship Development.

## 2.2.3. Cross-Referencing

Besides searching in the abovementioned databases and scientific journals, cross-referencing was also used, which allowed the identification of interesting contributions by matching the bibliographic references of the articles found via the research chains.

## 2.3. Selection and Evaluation

In line with the standard protocol of an SLR, the following criteria were used to decide which articles were to be included in the final revision.

#### 2.3.1. Exclusion Criteria

In the first stage, we applied a set of exclusion criteria to every article and study, summarized in Table 3:

 Table 3. Exclusion criteria.

Exclusion Criteria	Explanation
Duplicated articles	Duplicated studies and articles cannot be considered in the revision as separate studies
Studies that focus on other topics about entrepreneurship. Special note to those that are related to entrepreneurial education but also to results of evaluation, curricula, and teaching methodologies, or those that are not directly associated with the program's implementation	The focus of this research is the decision-making process related to implementing EE programs
Source: created by the author.	

These criteria were applied by reading the abstract and the title of every article identified by the different research chains created specifically for this research work. The articles that were not excluded were then evaluated based on the inclusion criteria that are presented in the next subsection.

## 2.3.2. Inclusion Criteria

Applying the inclusion criteria involved reading in full each of the articles that passed the previous stage. It was based on the following action segments:

Empirical articles/studies included in the final revision:

Those that addressed directly some of the questions of this research;

(i) Those that conducted an analysis of the relevant literature in the field and were based on a conceptual tool;

(ii) Those that presented logical and well-structured conclusions that contributed to knowledge;

(iii) Those that presented a clear definition of the variables and study methodologies and a clear interpretation of the results in the context of the literature and the theoretical models that already exist.

Articles/studies of a different nature to the empirical ones that were included in the final review:

- 1. Addressed in a direct way some of the issues of the present research;
- 2. Made a clear contribution to knowledge;
- 3. Presented in a clear way the adopted assumptions.

## 2.4. Analysis and Summary of the Results Obtained

#### 2.4.1. Data Extraction

The results obtained by implementing the methodology with which we narrowed the search through exclusion and inclusion criteria are presented, respectively, in Tables 4 and 5:

Table 4. Extraction of references in the selected databases.

Database		TOTAL				
Database	A1	A3	A4	<b>A</b> 7	A8	· IOIAL
B-On	157	0	17	12	56	242
Google Scholar	36	2	2	3	48	91
EBSCO	94	0	4	0	0	98
TOTAL	287	2	23	15	104	431

Source: created by the author.

**Table 5.** Extraction of references in the selected scientific magazines and journals.

Magazine/Journal	Number of Extracted References						- TOTAL	
Wagazine/Journal	<b>A</b> 1	A2	A4	<b>A</b> 5	<b>A</b> 6	A7	A8	· IOIAL
The International Journal of Management Education	0	0	0	0	0	1	5	6
International Journal of Public Policy	3	6	2	2	2	1	1	17
European Economic Review	1	0	0	0	0	0	27	28
Journal of Business Venturing	0	0	0	0	0	0	45	45
Entrepreneurship & Regional Development—An International Journal	0	0	0	0	0	0	1	1
TOTAL	4	6	2	2	2	2	79	97

Source: created by the author.

We ascertained that 431 references were identified from the research chains used. Of these, 242 appeared in B-on, 91 in Google Scholar, and 98 in EBSCO. It should also be noted that three of the eight search chains (i.e., A2, A5, and A6) did not present any results, which is why they are not mentioned in the above table. The same applies to the Web of Science and SSRN databases. The support services of both platforms were contacted, which gave us indications as to how to optimize the search. However, even after applying these recommendations, no references were registered/identified for the search chains used.

It was possible to identify 97 articles in the 16 previously selected journals. Once again, we confirmed that one search chain (i.e., A3) did not allow the finding of any reference of interest in 12 journals that were part of the initial list—these are not mentioned in the above table. It should be noted that efforts were made to understand why these 12 journals did not allow for the identification of relevant contributions to the present work. Table 6 summarizes the work carried out in this area:

**Table 6.** Summary of the interactions with the editors.

Scientific Journal	Summary of the Interactions
Review of Educational Research Sociology of Education Journal of Experimental Education	The support services of the online platforms of these 3 scientific journals were contacted and gave indications as to how to optimize the research. Even after applying these recommendations, they did not register/identify references for the chosen words.  Using other titles marketed by the publisher of these
The Journal of Experimental Education Journal of European Public Policy	scientific journals, it was found that their common search engine recognizes the Boolean search format that we use. This allowed us to conclude that, in fact, these two titles do not generate any results when using our search chains.
Journal of Entrepreneurship Business and Economics	The platform's support services were contacted and gave indications as to how to optimize the search. Even after implementing these instructions, it was not possible to obtain results in our search chains. It should be noted that the alternative search platform suggested to us was not used, as it was under development.
Journal of Small Business & Entrepreneurship Development Theories of the Policy Process	After several attempts to contact the support services, the only response obtained was that they were analyzing our situation, so we should wait for their feedback. This scientific journal is published by Westview Press, which specializes in books, so its website only allows you to buy this type of work.
Review of Policy Research Journal of Economic Surveys Entrepreneurship Research Journal	As with previous platforms, we also contacted the respective support services; however, we did not obtain any feedback from them.

Source: created by the author.

## 2.4.2. Applying the Exclusion Criteria

As it can be observed in Table 7, 415 articles were excluded by the exclusion criteria, 232 of which were extracted from B-ON, 85 from Google Scholar, and 98 from EBSCO. The criteria "not related to the theme" was responsible for the exclusion of 313 references. Of these, 69 constituted articles that focused on topics related to the EBS but that were not central to the present research. Duplication was also the reason for the exclusion of 102 documents.

**Table 7.** Number of articles excluded by exclusion criteria—bibliographic databases.

Bibliographic Database	Duplicated Articles	Not Related to the Research Topic (Focusing on Subjects Other than EEP)	Total
B-On	10	175 (47)	232
Google Scholar	7	62 (16)	85
EBSCO	85	7 (6)	98
Total	102	313	415

Cumulatively, Table 8 shows that 94 references found in journals were excluded. Of these, 93 were based on the criterion "not related to the theme". The remaining reference was also excluded because it was duplicated.

The application of the exclusion criteria resulted in the selection of 19 articles, 16 of which were identified through the biographical databases and 3 through the platforms of the previously selected scientific journals. These 19 papers, which are listed in Table 9, were subject to an exhaustive reading assessment to apply the inclusion criteria.

**Table 8.** Number of excluded articles—scientific journals.

Scientific Journal	Duplicated Articles	Not Related to the Research Topic (Focusing on Subjects Other than EEP)	Total
The International Journal of Management Education	0	4 (0)	4
International Journal of Public Policy	1	16 (0)	17
European Economic Review	0	28 (0)	28
Journal of Business Venturing	0	21 (23)	44
Entrepreneurship & Regional Development—An International Journal	0	0 (1)	1
Total	1	93	94

Source: created by the author.

**Table 9.** Articles subjected to the inclusion criteria.

Article	Authors	Year	Scientific Journal
The Role of Entrepreneurship Education as a Predictor of University Students' Entrepreneurial Intention	Ying Zhang, Geert Duysters, and Myriam Cloodt	2013	International Entrepreneurship Management Journal
Entrepreneurship Education Based on the Change Laboratory	Daniele Morselli, Massimiliano Costa, and Umberto Margiotta	2014	The International Journal of Management Education
Measuring Entrepreneurial Self-Efficacy to Understand the Impact of Creative Activities for Learning Innovation	Shima Barakat, Monique Boddington, and Shai Vyakarnam	2014	The International Journal of Management Education
The Entrepreneurial Earnings Puzzle: Mismeasurement or Real?	Thomas B. Astebro and Jing Chen	2012	Journal of Business Venturing

Source: created by the author.

## 2.4.3. Applying the Inclusion Criteria

The application of the inclusion criteria led to the exclusion of 12 articles, which were all empirical works whose contents were not directly related to the scope of this research. The details of the reasons for exclusion are presented in Table 10:

**Table 10.** Articles subjected to inclusion criteria.

Article	Authors	Year	Work Scope
Self-Assessment of Croatian Elementary School Pupils on the Entrepreneurial Initiative	Dijana Vican and Daliborka Luketić	2013	Outside the direct scope of the investigation, given that the article is focused on understanding the assessment made by students of the quality of entrepreneurship programs, as well as their sociodemographic characterization.
A Comparison of Students Use of Effectuation and Causation Principles with That of Practitioners	Stefan W. Arteaga, Hans-Gunnar E. Grepperud, and Marie N. Hermansen	2013	Out of the direct scope of the research, since the data presented in the article are based on an attempt to understand students' perspectives, compared with specialists in entrepreneurship, on the creation of businesses.

Table 10. Cont.

Article	Authors	Year	Work Scope
Entrepreneurship Education	Jonathan Bainée	2013	Although related to the identification of the best teaching practices in entrepreneurship, the article focuses on the evolution of training methodologies and the most innovative practices used at the time of publication, which is outside the direct scope of our research.
The Relationship Between Education and Entrepreneurship in Eu Member States	Camelia-Cristina Dragomir and Stelian Pânzaru	2015	The article includes the analysis of the curricular models of different member states of the European Union, and its study is focused on the analysis of potential relationships between education and the development of the entrepreneurial spirit. In this sense, the article is not directly related to the scope of our research.
Aspects of Entrepreneurship and Entrepreneurial Education in Romania	Iosif Moldovan	2015	Outside of the direct scope of this research, since the article is essentially focused on evaluating the perceptions of Romanian entrepreneurs regarding the factors that contribute to the success of entrepreneurship education in Romania.
Research on the Quality Evaluation System of Entrepreneurship Education Based on Efficiency	Xiansheng Liu	2015	Outside of the direct scope of this research, since the article is essentially focused on understanding the criteria that should shape the university evaluation system of education for entrepreneurship.
A Chance to Improve the Relationship Between Universities and Business in the Knowledge Society	Diaconu Mihaela and Zaharia Milena Rodica	2009	Outside of the direct scope of this research, since the article is essentially focused on understanding the role and organizational structure that universities and other institutions must have in the entrepreneurial ecosystem.
Entrepreneurial Intention of Students and Unemployed Persons in Romania: A Case Study on the South-East Region and the South-West-Oltenia Region	Laura Patache and Paula Cornelia Mitran	2014	The article is essentially focused on analyzing the results of an entrepreneurship education project from the point of view of its participants, which is outside the direct scope of our research.
The Role of Entrepreneurship Education as a Predictor of University Students' Entrepreneurial Intention	Ying Zhang, Geert Duysters, and Myriam Cloodt	2013	The investigation presented in the article is based on an attempt to establish relationships between entrepreneurship education and the intention to create businesses. It is not aligned with the direct focus of our research.
Entrepreneurship Education Based on the Change Laboratory	Daniele Morselli, Massimiliano Costa, and Umberto Margiotta	2014	The article analyzes the results of an EE project, namely the most impactful events and methodologies from the point of view of the participants, which is not the direct focus of our research.
Measuring Entrepreneurial Self-Efficacy to Understand the Impact of Creative Activities for Learning Innovation	Shima Barakat, Monique Boddington, and Shai Vyakarnam	2014	Outside of our scope, since the article is essentially focused on analyzing the details of the implementation of a platform for conducting surveys in the area of education for entrepreneurship.
The Entrepreneurial Earnings Puzzle: Mismeasurement or Real?	Thomas B. Astebro and Jing Chen	2012	The article is totally focused on understanding why individuals become entrepreneurs when they earn less, on average, compared to those who are employed by others. It is aligned with the scope of our research.

Source: created by the author.

# 2.4.4. Applying Cross-Referencing

According to Hart [71], cross-referencing can also be used to identify relevant sources of information. The use of this technique allowed two additional articles to be found, which are listed in Table 11:

Table 11. Articles included through cross-referencing.

Article	Authors	Year	Scientific Journal
Key Competences in Europe: Interpretation, Policy Formulation and Implementation	Gábor Halász and Alain Michel	2011	European Journal of Education
The Implementation of Entrepreneurship Education through Curriculum Reform in Finnish Comprehensive Schools	Jaana Seikkula-Leino	2011	Journal of Curriculum Studies

Source: created by the author.

These articles were duly evaluated based on the exclusion and inclusion criteria previously presented.

#### 3. Results

Articles Included in the Final Literature Review

In the end, only nine articles were included in the final literature review (a fact that highlights the need to develop the subject scientifically). Seven were identified directly based on the SLR protocol. The other two resulted from the use of the cross-referencing technique. Table 12 lists these articles.

**Table 12.** Articles included in the final review.

Article	Authors	Year	Scientific Journal
Youth Entrepreneurship in South East Europe: Some Policy	Mirela Xheneti	2007	Small Business Research Centre,
Recommendations The Analysis of Certified Teachers/Trainers of Entrepreneurship in Croatia	Zrinka Gregov, Vesna Cvitanović, and Vladimir Žanić	2011	Kingston University Entrepreneurship and Macroeconomic Management
A Policy Study of Entrepreneurship and Enterprise in Education	Ron Mahieu	2006	Umeå School of Business—Umeå University
The Importance of Entrepreneurial Learning on the Example of the South East European Center for Entrepreneurial Learning in Croatia	Sanja Maleković, Sanja Tišma, and Ivana Keser	2016	The European Journal of Applied Economics
Entrepreneurship Education and Its Outcomes	Brian Rigley and Ramona Rönnqvist	2010	Umeå School of Business-Umeå University
Entrepreneurship Education in Schools: Empirical Evidence on the Teacher's Role	Elena Riskovaara and Timo Pihkala	2014	The Journal of Educational Research
The Impact of an Entrepreneurship Education Program on Entrepreneurial Competencies and Intention	Jose Sanchez	2013	Journal of Small Business Management
Key Competences in Europe: Interpretation, Policy Formulation and Implementation	Gábor Halász and Alain Michel	2011	European Journal of Education
The Implementation of Entrepreneurship Education through Curriculum Reform in Finnish Comprehensive Schools	Jaana Seikkula-Leino	2011	Journal of Curriculum Studies

Source: created by the author.

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Based on the systematic literature review undertaken, and the specific methodological approach used, we were able to divide the main findings and contributions into three distinct parts.

The first part highlights the characteristics of the work carried out on the importance of entrepreneurship for the economic development of countries and their regions. The second part addresses the theme of the EAS in the context of the paradigm shift that has characterized Western societies at the beginning of the 21st century. The third part highlights the importance of normative requirements that involve difficult and complex political processes at the level of the strategies adopted by EU Member States, as well as the application of SPS in the study of the implementation process of an EEP in a Swedish region.

#### 4. Discussion

## 4.1. Main Lessons from the Systematic Literature Review

The most striking aspect that the SLR protocol brought to the fore was the fact that, among the plethora of texts proposed, only nine were selected—a situation indicating the existence of a gap in the literature that the SLR was able to screen that needs to be addressed. However, it should be noted, as we will see next, that the existing literature offers interesting and important insights into the topic at hand.

Among the literature analyzed was the Multiple Streams Framework by John W. Kingdon [61] (further developed by Zahariadis in 1998 and 1999 [65–67]) and the writings of Mahieu [72] on the implementation of SEEs at a pre-university school level in Sweden. The Kingdon model has contributed to systematizing processes for scheduling and formulating policy solutions, i.e., the pre-decision process. We also highlight the study conducted by Halász and Michel [73], wherein the two authors highlight the different "times" in which the different EU countries progress in educational (and legislative) matters. Taking the European recommendation on key competences as a reference [32], the authors understood that different countries found different ways and instruments to introduce the recommendations in the education system: while some countries achieved this through legislation (such as Portugal), others (namely in Northern and Eastern Europe) had at their disposal legal tools that allowed for a greater streamlining of the process. (There is an urgent need to contextualize the Recommendation within EU legal instruments. In addition to sources of primary law, such as the Treaties, there is a hierarchy within the instruments of secondary law, as provided for in Article 288 TFEU. While the Regulation, the Directive, and the Decision are binding (although with different scopes of application), the Recommendation and the Opinion are at the bottom of this hierarchy, having no binding effect and having a declarative nature.) Another aspect identified by the authors in support of political commitment that is no less important is the capacity to implement reforms. In other words, the authors identified that implementation was much more effective when there were structures set up and aligned that were capable of receiving and implementing the new directives.

Within this framework, let us make a synthesis of the main lessons from the SLR through the three strands identified above. Regarding the impact of entrepreneurship on economic, social, and political development, we note that the different authors and works analyzed were unanimous in supporting the idea that entrepreneurship is fundamental to the progress and evolution of countries and their regions. Mahieu [72] and Rigley and Rönnqvist [74], for example, defend the importance of entrepreneurship policies and programs in contributing to job creation in the regions analyzed, enabling the general development of society. They also argue that teaching entrepreneurship fosters the development of key characteristics of individuals who, at the end of the day, are more proactive, more creative, less risk-averse, and more concerned with society as a whole. The research carried out by Xheneti [75] sought to understand the success factors for the implementation of entrepreneurship programs that present solid results for socio-economic progress. From this perspective, the author not only identified the need for the alignment of different stakeholders (from governments to NGOs), but also noted the importance of

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providing students with practical tools, something that allows them to be individuals who are properly prepared for the challenges of a society in permanent change.

Within the research related to the importance of entrepreneurship in the paradigm shift of Western societies, our SLR focused on six works by different authors, who analyzed the practical results of implementing entrepreneurship education programs in their regions. It should be noted that Mahieu [72]; Gregov, Cvitanović, and Žanić [76]; Ruskovaara and Pihkala [77]; and Maleković, Tišma, and Keser [78] present evidence of the importance of the involvement of institutions from different spheres, namely the business community, universities, and the government, for the success of these initiatives, reinforcing the practical sense of the relationship of the school community with the reality that surrounds them. Jaana Seikkula-Leino [22], when presenting the conclusions on the implementation of the EBA in Finnish schools, also notes that the programs were based on cooperation with the community, enhancing their success.

In a transversal way, all the authors present evidence about the importance of EE in the development of the thought and attitudes of young people; standing out in this regard is Sanchez [79], whose results supported entrepreneurship programs as encouraging better identification, evaluation, and exploration of opportunities by students, promoting a positive and more proactive attitude towards risk.

Finally, at the level of the public policy decision-making process, the selected articles sought to understand the impact of the recommendations of organizations at different levels (supranational, national, and subnational) in changing the political agendas of different actors and communities. In the first article analyzed, Halász and Michel [73] focused their research on the impact of the 2006 European Recommendation on key competences in the different Member States [32], and reached relevant conclusions, namely (i) the fact that most countries changed their school curricula to be aligned with the recommendation and (ii) the fact that this change/implementation process presented different adoption rhythms and methodologies (e.g., curriculum reforms and legislation). In general, these authors conclude that the successful implementation of such a Recommendation is based on two parallel factors, political commitment and implementation capacity, and its success is most likely in countries where the support of key educational policy actors is associated with a good understanding of the logic of curricular change and the use of appropriate policy instruments. In the study conducted by Mahieu [72], wherein recommendations from bodies such as the OECD and the EU are analyzed, the author concluded that decisions at the supranational level aimed at forming new education policy recommendations could potentially lead to the willingness of national bodies to put the issues of the EE on the national agenda.

## 4.2. Limitations and Possibilities

The very fact that only nine texts were identified through the SLR methodology may suggest that a comprehensive study conducted on this matter needs to include other methodologies to broaden the scope and horizon of the prospective research material. Indeed, we empirically observed that a traditional literature review (in which texts that would otherwise be considered "grey literature" and therefore would not pass through SLR protocol) was an inestimable addition.

A traditional review brought to the fore some documents that pertained to what may be called "grey literature" on decision-making concerning EE and EE programs—which [80–115] are but a sample of that type of review. However, very few addressed the topic in a straightforward way. The result of this traditional review complemented to a great extent the results of the SLR detailed here. This means that although the SLR is still an academically validated methodology, it is not exempt from limitations and, thus, its results should not be taken as exhaustive—especially in areas such as social sciences and policy studies, or in situations in which the focus of the analysis is very recent. In such areas, discussions take place mainly outside the purely scientific system. In other words, there is plenty of valid literature that can and should be addressed and used that did not

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undergo the peer reviewing process or is not indexed in the databases of reference. All of this literature confirms that there is little discussion concerning the reasons why there is still such a residual implementation of EEP in compulsory schooling, despite the fact that EE is considered by the EU and the UN as a fundamental competence.

#### 4.3. Conclusions

The field of research that we intended to explored seems to be a fertile ground, capable of being analyzed in diverse aspects and in various ways. In fact, it can be seen that the driving force of the initial research that led to this paper—the understanding of decision processes associated with the implementation of EEPs—is capable of filling an important gap in knowledge. Despite the myriad of articles, theses, reports, and books already published in related areas, the results of the SLR (a tried-and-tested methodology) brought to the fore that there is a gap in the literature. Indeed, only nine texts made it to the final review. This is a clear sign that a gap exists that still needs to be addressed and that, therefore, more studies on this specific subject need to be carried out.

Although the idea of stimulating entrepreneurship in society reflects the political ambition to create both economic and personal growth [2], it is worth emphasizing that the process of implementing public policies has proven to be a true "missing link" in discussions on how states manage situations related to entrepreneurship education. In particular, the studies available: (i) focus almost exclusively on the contents, pedagogical methodologies, and impact of the EE programs, omitting reference to the process related to their decision and implementation; (ii) evidence a generalized consensus on the need for EEPs in compulsory schooling—in the "worst-case scenario", students would arrive at their work lives or higher education with better knowledge about these topics; and (iii) subordinate the answers to the question "why is there still not a generalized dissemination of EE in compulsory schooling?" Cumulatively, the literature review also revealed a gap regarding the holistic understanding of the decision process inherent to the implementation of EEPs in compulsory schooling. In fact, (i) there is evidence that entrepreneurship education should be used as an opportunity to create value in a superior and more tangible manner than it is today [2], and (ii) there is no work that considers public policies and the respective policy-making processes and that allows for an understanding of the decision-making process regarding the implementation of EE programs in compulsory education.

We live in an era of uncertainty and of new challenges. On the one hand, the COVID-19 pandemic has led to disruptions in the way leaders across the world expect the labor market to be in the near future [116]—more digital, more innovative, but with different and neverbefore-seen types of restrictions. On the other hand, institutions and governments around the world have been supporting the idea that future generations need to think differently, in a more innovative, sustainable, civic, and critical manner. Both the European Green Deal [117] and the 2030 Agenda for Sustainable Development of the UN are clear examples of this, providing new goals and objectives for societies to achieve in the near future.

Based on this, we are convinced that objective and clear strategies that allow the implementation of world-wide entrepreneurship education could contribute to a better prepared and adapted society. By training and preparing youngsters to have a more active and dynamic mindset, gained through entrepreneurial skills, we could help to empower them to be able to face and excel in the (increasingly) challenging world that we are (and will continue) living in, so that they become better citizens who can help develop our social and economic outlook.

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