



## ICEE Innovation Cluster on National Strategies

### Comparative Analysis of Eight National Strategies on Entrepreneurship Education

The document provides an overview of the outcomes of the ICEE Innovation Cluster on National Strategies.

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Each cluster member has written a country review about the national state of play of a strategy/plan supporting entrepreneurship education and contributed to the discussion by participating in meetings and online calls.



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## Executive Summary

This document contains a **comparative analysis of eight countries' national strategies or initiatives for entrepreneurship education**. The work was carried out in collaboration between members of the 'National Strategies Cluster' in the Innovation Cluster for Entrepreneurship Education (ICEE) project from June 2015 to July 2016. The working group had the purpose to share information about national plans supporting entrepreneurship education; analyse systemic issues that drive or hinder the success of a plan, come up with suggestions on how to develop and implement a strategy, and how to review and improve it on a regular basis. The countries involved are **Belgium (Flanders), Croatia, Denmark, Estonia, Finland, Italy, Latvia, and Norway**. Information from other countries and/or information at the European level are included across the document.

The countries represented in the cluster are at different stages of development and implementation of a national strategy for entrepreneurship education. The analysis seeks to bring out **similarities as well as differences** between the countries and to identify what the **success factors** are when it comes to set and scale up national initiatives supporting entrepreneurship education. The analysis and comparison is made by using as an analytical tool the "Progression Model for Entrepreneurship Education Ecosystems in Europe"<sup>1</sup> – which provides a framework for a systematic development in the area, with the ultimate goal of entrepreneurship education being available at every school and for every student in the Member States.

By taking into account the key components described in this framework, the following dimensions have been identified by the ICEE cluster on National Strategies as being important in any country's efforts to move ahead with entrepreneurship education in a structural and efficient way:

- Provide a broad policy platform for the work; a cross-ministerial collaboration, with the Ministry of Education in a leading role and with actors from as many policy domains as possible.
- Agree on a joint and broad vision of entrepreneurship as key competence for all learners as well as on the role and purpose of entrepreneurship education which supports personal development, active citizenship, social inclusion and employability, rather than only being associated with business.
- Have strong involvement from the education and business sector and seek intensive engagement from organisations such as employers' organisations, unions and other national organisations that can support and strengthen dimensions in entrepreneurship education.
- Maintain strong stakeholder relations; create win-win situations, involve stakeholders in designing, planning, implementing and evaluating policy and activity.
- Understand and recognise the key role NGOs such as Junior Achievement can play as entities responsible for implementation and national support.
- Respect the autonomy of educational institutions as long as they comply with national qualification framework or steering documents.
- Work from top to bottom (macro) as well as from bottom up (micro), and remember the level in-between (meso), constituted by such stakeholders as school principals and school management.
- Implement initiatives at all education levels and in all educational fields through a progression model.
- Acknowledge the teachers' role to function as facilitators.
- Cover entrepreneurship in initial teacher training as well as in continuous professional development.
- Map the spread and measure the impact of entrepreneurship education.
- Build in measures to evaluate and monitor the strategy initiatives. Link the strategy to an evaluation plan.
- Create visibility and raise awareness about entrepreneurship education.
- Ensure career guidance for young people who want to realise their entrepreneurial ideas/make start-ups during and after their education.

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<sup>1</sup> European Commission, DG Enterprise and Industry and DG Education and Culture, *Towards Greater Cooperation and Coherence in Entrepreneurship Education*, 2010. See Annex 1 for further details.

Based on the experiences from the eight countries involved in the analysis, the development and implementation of national strategies on entrepreneurship education is often a long and slow process. Several challenges lie in their design and implementation but a **deeper understanding about success factors and key elements to consider** may help new countries moving into this area.

After an introduction about the ICEE project and its cluster on National Strategies (Chapter 1), this document provides an overview of the analysis (Chapter 2) with details about countries achievements (Chapter 3) and offers detailed information about success factors and key topics that should always be covered in a national strategy on entrepreneurship education (Chapter 4). An overview of the good practices identified by the cluster closes the document (Annex 3).

## 1. Introduction

### 1.1 The ICEE Project

The Innovation Cluster for Entrepreneurship Education (ICEE) is a 3-year policy experimentation project (1 February 2015 - 31 January 2018) co-funded by the European Commission under Erasmus+ programme.

It aims to analyse the impact of entrepreneurship education and understand what is needed to reach the European goal, which is that every young person should have a practical entrepreneurial experience before leaving compulsory education.

Within the project, all partners participated in a peer evaluation exercise, by sharing good practices available at national and regional level and discussing success factors and policy recommendations on four main topics: national strategies, teacher training, content and tools, assessment.

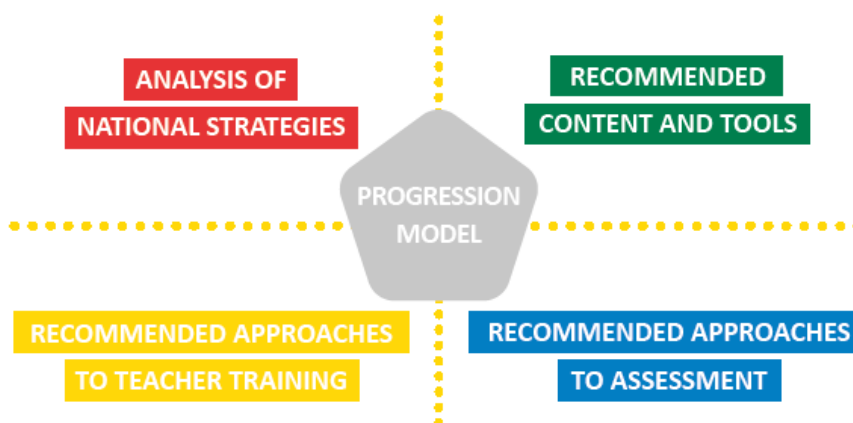


Figure 1: ICEE Innovation Clusters

The final purpose is to define a common progression model describing how entrepreneurship education can flow from primary to upper secondary and to combine outcomes of the innovation clusters and results of the field trials to provide policy recommendations on how to ramp up the penetration of entrepreneurship education in European schools.

### 1.2 The ICEE Innovation Cluster on National Strategies

Within this framework, the purpose of the National Strategies cluster is to make a comparative analysis to identify **key elements and success factors of national plans that support entrepreneurship education**. The ultimate goal is to generate knowledge that can be easily shared across borders.

The members of the Innovation Cluster on National Strategies are Belgium-Flanders, Estonia, Finland, Italy and Latvia with government representatives. Croatia is represented by Josip Juraj Strossmayer University, Denmark by The Danish Foundation for Entrepreneurship, Norway by Eastern Norway Research Institute.

All of these countries have a focus on entrepreneurship education with several activities in place. All of them have worked with strategies related to entrepreneurship or entrepreneurship education, either in the form of a specific strategy for entrepreneurship education, a strategy which includes entrepreneurship education, or

other strategies which are part of an agenda for introducing entrepreneurship in the education system. The countries are at various stages in the development of these strategies and approach the topic in different ways.

The **Danish Foundation for Entrepreneurship** with its experience as a national knowledge centre mapping the spread and researching the impact of entrepreneurship education in Denmark led the working group; while **JA Europe** was in a supporting and strategical role by linking the activities and the discussion of the National Strategies Cluster to other relevant initiatives at the European Level. As Europe's largest provider of educational programmes for entrepreneurship, work readiness and financial literacy, JA Europe contributed to the work in 3 ways: 1) by sharing its knowledge about the implementation status of entrepreneurship education in 39 countries; 2) by providing the group with relevant information about initiatives at European level; 3) by linking the outcomes of the discussion to the European Entrepreneurship Education NETWORK (EE-HUB)<sup>2</sup>..

### 1.3 Background

Entrepreneurship education is an important factor in changing and developing society. **Sense of initiative and entrepreneurship** is recognised by the European Commission as one of eight key competences that should be stimulated at all levels of the education system. Therefore, during the last decade, there has been a specific focus on developing national strategies which support entrepreneurship in the European countries.

The **Council of the European Union** has determined four strategic goals for collaboration in education and training, one of which is to promote creativity, innovation and entrepreneurship at all educational levels. Emphasis is placed on creativity and innovation being prerequisites for wealth creation and for Europe being internationally competitive. Collaboration between different educational levels and working and business life is meant to help when promoting innovation and entrepreneurship in all forms of education.

Through the Entrepreneurship 2020 Action Plan and the Rethinking Education Communication, the **European Commission** has emphasised the need to embed entrepreneurial learning in all sectors of education. Member States are asked to provide all young people with practical entrepreneurial experience before leaving compulsory education, highlighting the importance of learning by doing within education and training.

The **European Parliament** is backing the Commission's initiatives with several reports stressing the necessity to develop entrepreneurship education further (e.g. Skills policies for fighting youth unemployment - 2016, Promoting Youth Entrepreneurship through Education and Training – 2015). In the resolution of 8 September 2015 on promoting youth entrepreneurship through education and training, the Parliament underlined that some Member states *'have yet to develop a cross-cutting policy or a strategic approach to entrepreneurship education or entrepreneurial curricula and teaching methods; whereas not all teachers and education leaders in Europe are sufficiently trained in entrepreneurship education, either through continuous professional development or through their initial training, which might have an impact on the potential for entrepreneurship becoming sufficiently embedded in education systems'*.

The **European Union** recognised the importance of entrepreneurship with the Lisbon Strategy for Growth and Jobs (Lisbon European Council 2000 and 2005), requiring member states to support entrepreneurship education in schools and colleges. Progress reports in 2007 and in 2009 showed slow developments. *'Much entrepreneurship education practice tends to be ad hoc, varies vastly in quantity and quality, is not treated systematically in the curriculum and has relied heavily on the enthusiasm and commitment of individual teachers and some schools. Some activity is structured and ambitious, much is not'* (European Commission, 2010). Although education systems often aim to integrate entrepreneurial approaches across the curriculum, it is rare to see this implemented on the ground in schools. A core outcome of the High Level Reflection Panels on Entrepreneurship 2010 was the need to embed entrepreneurial learning in *'every national [...] education strategy to enable core entrepreneurial competences to be developed from primary and secondary level education as a mainstreamed part of the curriculum'*. In order for efforts in entrepreneurship education to actually succeed, and in order to reach all students, it is critical that entrepreneurial learning activities are

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<sup>2</sup> EE-HUB is a focal point bringing together organisations and individuals from both the public and private sectors with strong records of accomplishment in entrepreneurship education at regional, national and European level. More information available: <http://www.ee-hub.eu/>

adapted to fit into existing curricula and be embraced by policy makers in the Ministries of Education to encourage further uptake of practical approaches to entrepreneurship education.

An **increasing number of countries are developing national strategies for entrepreneurship education and several key challenges lie in their implementation.** The countries sit in a variety of positions: some are already into the evaluation of existing strategies; while others are moving into the initial stages. Closer collaboration between ministries is necessary, as stakeholders in entrepreneurship education extend beyond the educational system itself. In addition, there is a clear need to understand the required outcomes, with measures in place to monitor whether the programmes and policies are effective.

**Working groups, peer-learning activities and cooperations at international level are key** to increase the level of understanding of what is needed at policy level to spread out entrepreneurship education by providing the resources and the support needed.

## 2. Overview and Structure of the Analysis

Information about the national plans and initiatives supporting entrepreneurship were collected through a **questionnaire and interviews with ministry representatives or other representatives of the eight countries** (see Annex 2 for further details). The focus was on countries' principles behind the policy, outcomes of the policy, hindrances, success factors and suggested recommendations.

Collected information were analysed by focusing on four areas that, according to the **Progression Model for Entrepreneurship Education Ecosystems in Europe** (see Annex 1 for further details), are considered important when implementing a national strategy on entrepreneurship education:

- The process of developing the national strategy framework
- Support to educational institutions, teacher education and training
- Developing an active role for local and regional authorities
- Engaging with businesses, private associations and organisations

Table 1 summarizes the information collected in this scouting phase and provides an overview of countries' answers about key components of entrepreneurship education at national level.

| Information Collected<br>(January - March 2016)                                | BE-<br>FL | CR<br>(HR) | DK | EE  | FI | IT | LV | NO |
|--|-----------|------------|----|-----|----|----|----|----|
| <b>Developing the national strategy framework</b>                              |           |            |    |     |    |    |    |    |
| 1) Has an EE strategy, comprising all levels, been implemented?                | √         | *          | √  | √*  | √  | *  | -  | √  |
| 2) Is there a national definition of EE?                                       | √         | -          | √  | √** | √  | √  | √  | √  |
| 3) Is there a national knowledge centre comprising all levels?                 | √         | -          | √  | -   | -  | -  | -  | √  |
| 4) Is there a cross-ministerial cooperation on EE?                             | √         | -          | √  | √   | √  | -  | -  | √  |
| 5) Are there other partnerships on EE?   | √         | -          | √  | √   | √  | √  | √  | √  |
| 6) Are there main goals for your national strategy?                            | √         | -          | √  | √   | √  | *  | -  | √  |
| 7) Is there a plan for evaluation of the strategy?                             | √         | -          | √  | √*  | -  | *  | -  | √  |
| 8) Do you map the spread and assess the impact of EE?                          | -         | -          | √  | √*  | -  | *  | -  | √  |
| 9) Is EE implemented at all levels of education?                               | √         | -          | √  | √*  | √  | *  | -  | √  |
| <b>Support to educational institutions, and teacher education and training</b> |           |            |    |     |    |    |    |    |
| 10) Is EE part of initial teacher training?                                    | √         | √          | √  | √*  | -  | -  | √  | √  |
| 11) Is it part of continuing prof. education for teachers?                     | √         | √          | √* | √*  | √  | -  | √  | √  |
| 12) Is there funding for educational institutions?                             | √         | -          | √  | √   | √  | √  | -  | √  |
| 13) Do you assess teachers, materials and methods?                             | -         | -          | √  | √*  | -  | √  | -  | √  |
| 14) Is EE embedded or taught as a stand-alone subject?                         | √         | -          | √  | √   | √  | -  | √  | √  |

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| 15) Are there networks, guidelines, promotion, programmes, awards, website, etc. on the school area?  | √ | - | √ | √ | √ | √ | √ | √ |
| <b>Developing an active role of local or regional authorities</b>   |   |   |   |   |   |   |   |   |
| 16) Is there any local or regional studies/funding of EE?   | √ | - | √ | √ | √ | - | √ | √ |
| 17) Are there any regional EE centres?  | - | - | √ | √ | √ | - | - | √ |
| <b>Engaging with businesses and private associations and organisations</b>  |   |   |   |   |   |   |   |   |
| 18) Are businesses involved in the EE strategy?   | √ | - | √ | √ | √ | √ | √ | √ |
| 19) Is there research and/or are there results of collaboration between business and education in the field of entrepreneurship education?  | - | - | √ | - | √ | √ | - | √ |
| 20) Does the business sector fund EE projects?  | √ | - | √ | √ | √ | √ | √ | √ |
| 21) Are there particular focus areas which have been identified by or in collaboration with the business sector?  | √ | - | √ | √ | √ | √ | - | √ |
| v* starting in 2016<br>v** only in upper secondary school curriculum<br>*Croatia had a strategy on EE for 2010-14, which was not updated nor implemented.<br>**Italy started implementing school-work exchange as a mandatory activity for schools at secondary level and vocational schools (2015). The initiative includes goals and evaluation plans. Its impact will be assessed. |   |   |   |   |   |   |   |   |

**Table 1. Summary of country findings on national strategies for entrepreneurship education (based on data collected between January and March 2016)**

The eight countries in the ICEE cluster are at different stages of national strategy development and implementation. This variety of stages and approaches reflects the general picture across Europe.

Clearly, given the large variety of different contexts within Europe, there is no single route towards the goal of establishing a successful plan on entrepreneurship education. Even if different mechanisms are required in different circumstances, **understanding similarities and differences** between countries that are at similar stages of strategy development and implementation is helpful to identify key elements to keep into consideration.

The following three dimensions will be used in paragraph 3 to map out countries' similarities and differences as well as to identify success factors and good examples in each country that might be useful for others:

- WHO: ACTORS INVOLVED
- WHAT: CONTENT OF THE STRATEGY
- HOW: MODEL OF IMPLEMENTATION

The insights gathered will create a basis for giving recommendations for policy makers working with national strategies and suggest a *recommended table of content* or a *portfolio of activities* for creating national strategies on entrepreneurship education.

### 3. Analysis of the Strategies

The Progression Model for Entrepreneurship Education Ecosystems in Europe from the European Commission (see Annex 1 for further details) has been used as an analytical tool for the analysis. The model identifies four different stages of development of a strategy on entrepreneurship education:

1. Pre-strategy (based on individual initiative)
2. Initial Strategy Development
3. Strategy Implementation, Consolidation & Development of Practice
4. Mainstreaming

It then describes the typical features of each development stage by focusing on the following key elements:

- National strategy or frameworks
- Schools
- Teachers
- Regional and local authorities
- Businesses, private associations and organisations

Looking at the information collected from the eight countries and analysing them by using the elements of the European Commission's Progression Model (see Annex 1 for further details), it becomes clear that **the eight countries involved in the analysis are at a different stage of implementation** with situations where a national strategy on entrepreneurship education is in place and structured since a long time (as in Belgium-Flanders, Denmark, Finland and Norway) and countries where the activities are more recent or not yet structured or evaluated as in the other countries (Croatia, Estonia, Italy and Latvia).

However, the situation in each country is useful to identify key elements that drive or hinder the success of a plan. For this reason, in the following paragraph, countries' achievements will be described by looking at actors involved (who), contents of the strategy (what) and model of implementation (how).

### 3.1 Actors Involved

This first paragraph presents the situation of entrepreneurship education in the eight countries of the analysis and provides details about the actors involved at both policy and implementation level.

#### 3.1.1 Belgium-Flanders

Belgium-Flanders has several years of experience on entrepreneurship education. Its first Action Plan was published in 2007, then updated in 2010-2014 and a new one (2015-2019) has just been released. Here the Action Plan for Entrepreneurship Education is a shared initiative between the Minister of Economy, Science and Innovation, Employment, Professional Training and Sports, the Minister of Education and the Minister of Agriculture, Fisheries and Rural Policy. It was written with input from different stakeholders (teachers, representatives of education-organisations, etc.) and adjusted after advice was given by the Flemish Education Council (VLOR) and Flanders Social and Economic Council (SERV).

A key role is played by a 'working group on entrepreneurship education', which is made up of representatives of all departments and agencies that are involved in the implementation of the plan<sup>3</sup>. This working group, besides contributing to the preparation of the Action Plan, follows up on evolutions in the field and on the actions taken by every department. Its members collaborate through frequent meetings (once a month), which ensures knowledge sharing and a harmonisation of the actions, thus preventing overlap between steps taken by different policy domains. Whenever a department of the Flemish authorities has a new initiative concerning entrepreneurship education, the working group provides advice in order to enhance the quality and to align it with all other existing measures.

The implementation of the strategy runs through different sub-projects and partnerships such as (non exhaustive list):

:

1. **Through a tender the department of education organizes substitutional activities** for secondary school pupils and their teachers to promote a more positive exchange between schools and companies. In this case teachers are involved in an internship in a private firm, while the organisation who provides these substitutional activities takes over the group of pupils and offers them different modules on entrepreneurship.
2. **Different NGOs and HEIs (Higher Education Institutions) who have successfully carried out bridging projects** that help to improve the partnership between education providers and businesses by setting up new forms of knowledge transfer and establishing a collaboration between at least one school and one or more businesses, or a business federation or organisation. Bridging projects have been

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<sup>3</sup> More precisely: the department of Education & Training, the department of Economy, Science & Innovation, the department of Work & Social Economy, the department of Agriculture & Fisheries, Flanders Innovation & Entrepreneurship, the Flemish Agency for Entrepreneurship Training Syntra Vlaanderen .



launched for several years now (100 projects completed as of 2016) and must respond to policy themes.

3. **Competento**, a virtual knowledge center offering teachers a large database of materials, such as policy and research reports, course materials, screening instruments, and events for teachers at all levels.
4. **Forum on Entrepreneurial Higher Education** was created by the former Flemish government and it is facilitated by Flanders Innovation & Entrepreneurship. It is a place for peer learning and knowledge sharing between teachers and other players from the education sector (intermediaries like Vlajo and SO&O - see below for further details - are also members). The forum can also influence policy, for instance by flagging needs that need to be tackled at the political level.
5. **Partnership between Flanders Innovation & Entrepreneurship and Vlajo (JA Flanders) and Stichting Onderwijs & Ondernemen (SO&O)**, both intermediary organisations, with a focus on bringing entrepreneurship education into schools.

The collaboration between schools and the business sector/local community is viewed by the authorities as being limited, but collaboration does take place.

### 3.1.2 Croatia

Croatia took initiatives in the area of entrepreneurship education 5-6 years ago.

The “Strategy on Entrepreneurial Learning 2010-2014” was made in a collaboration between two ministries: the Ministry of Economy, Labour and Entrepreneurship and the Ministry of Science, Education and Sport; with the Ministry of Economy, Labour and Entrepreneurship in the leading role.

The Strategy was based on a broad collaboration involving other important organisations at national level (e.g. employers’ organisation, employment office, etc.) and had two main objectives: 1) To raise public awareness about entrepreneurship and develop a positive attitude towards lifelong learning for entrepreneurship; 2) To introduce learning and training in entrepreneurship as a key competence in all shapes, types and levels of formal, non-formal and informal education and learning.

This initiative contributed to improving the country’s perception on entrepreneurship education but never continued into an implementation phase. Entrepreneurship education seems not to be a priority in any other strategic document of the Croatian government, even if the document on “Strategic development of entrepreneurship in the Republic of Croatia, 2013-2020”, refers to the importance of entrepreneurship education and its further development, and underlines that entrepreneurial skills are necessary for strengthening the quality of the management of small businesses.

### 3.1.3 Denmark

In 2010 Denmark has established a structure for cross-ministerial collaboration, by setting up a four-ministerial partnership for innovation and entrepreneurship in education. This partnership involves the Ministry of Business and Growth, the Ministry for Children, Education and Gender Equality, the Ministry of Culture, and the Ministry for Higher Education and Science and works on the political and strategic level to ensure that the main player on the implementation level has a strong political backing for its work. The Danish Foundation for Entrepreneurship (FFE) is the organisation responsible for implementing entrepreneurship education at all education levels in the Danish education system – from ABC to PhD.

This structure has existed since 2010 and has resulted not only in an increased number of young people who participate in entrepreneurship education but also in a broader understanding of the value of entrepreneurship education in general.

The partners meet at least four times a year to discuss the results of the work and to address new areas of interest. FFE is responsible for establishing and maintaining a broad collaboration with actors and stakeholders across society, including educational institutions, private businesses, municipalities and other regional authorities. The cooperation with educational institutions consists of different activities at the education levels, from providing advice, teaching materials and methods, events and competitions to hosting a teacher network as well as funding development projects on entrepreneurship education. About 25% (varying from year to year) of FFE’s annual revenue is used to fund projects in educational institutions on all levels. This funding scheme gives the schools a sense of ownership, which is important for their commitment.

By working with private and public organisations and engaging them in the activities, FFE is ensuring a good cooperation between the education system and the labour market. Private businesses and organisations are sponsors of FFE's activities and business people volunteer as judges at events organised by FFE, such as the annual Danish Entrepreneurship Award. Here they get the unique possibility of getting in contact with young people and supporting their development, which is a win-win situation for all parties. By maintaining a strong partnership with both the education sector and representatives of the labour market, FFE stands strong in getting the attention of the policy makers.

FFE also collaborates with 6 Regional Growth Forums in Denmark, consisting of members from the regional council, local authorities, educational institutions, business community, and commercial organisations. These growth forums have a focus on entrepreneurship and growth, many of them have also a focus on entrepreneurship in education.

### 3.1.4 Estonia

Estonia is on the verge of implementing its national strategy on entrepreneurship education and moving towards a more general perception of entrepreneurship.

As an extension of the Lifelong Learning Strategy 2020, which was approved by the government in 2010, the Ministry of Education and Research planned a measure for the systematic development of entrepreneurship education on all levels of education for the years 2014-2020 (financed through EU Social Funds). Implementation of the strategy started in 2016 after a two-year preparation period. Until then, entrepreneurship education has been given more sporadically at general, vocational and higher education institutions, often in connection with economics or business subjects. With the new programme, entrepreneurship education will begin to be implemented as a more general element throughout the education system, including all levels and fields of study.

The Ministry of Economic Affairs and Communications is directly involved in the work, together with the Ministry of Finance and educational institutions on different levels, employers' unions/associations, other organisations (such as JA and Economics Teachers' Association) and agencies (such as INNOVE). On top of this, there is also a collaboration with the enterprise centres in 15 counties. A large state-owned company (Eesti Energia) has supported an entrepreneurship programme for young people for years. The Estonian Chamber of Commerce took an initiative in 2008 and invited all relevant stakeholders (including ministries) for the preparation of a strategic framework for entrepreneurship education.

Estonia emphasises the great importance of the collaboration between many stakeholders, including already active entrepreneurs, for the development of a new strategy.

Estonia has had entrepreneurship education activities since 1994, when Junior Achievement Estonia was established. They provide activities for about 25,000 students every year.

### 3.1.5 Finland

Finland published its Guidelines for Entrepreneurship Education back in 2009. Here, two main actors work on entrepreneurship education at the ministry level: the Ministry of Education and Culture and the Ministry of Employment and Economy. Their collaboration is formalised through a 'Steering group for Entrepreneurship Education' with 15-20 people in total, representing organisations and unions/associations from trade and industry, education providers, local and regional authorities, etc.<sup>4</sup> who were responsible for preparing the strategy in 2009. Now, the Ministry of Education and Culture is setting up a new Entrepreneurship Management Group.

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<sup>4</sup> More precisely, the partners include the Ministry of Employment and the Economy, the Ministry of Agriculture and Forestry, the National Board of Education, the State Provincial Office of Southern Finland, the Central Chamber of Commerce, Confederation of Finnish Industries (EK), Federation of Finnish Enterprises, Confederation of Agricultural Producers (MTK), Association of Finnish Local and Regional Authorities, Trade Union of Education in Finland (OAJ), Economic Information Office, Finnish 4H Federation, Centre for School Clubs, Junior Achievement – Young Enterprise Finland, Finnish Enterprise Agency, Junior Chambers of Commerce, University of Oulu/Kajaani Department of Teacher Education, University of Turku/ teacher training school and Lappeenranta University of Technology.

Many actors from the Steering group are united in the 17 YES-centres, which work on the practical level for the common vision that *“every young child should have a possibility for entrepreneurship education”*. The 17 YES-centres are networks, funded by Junior Achievement Finland, the Federation of Finnish Enterprises, and the Economic Information Office, and involving four more partners: the Federation of Family businesses, the Trade Union of Education in Finland, the Confederation of Finnish Industries and the Confederation of Agricultural Producers. The YES-centres are involved in projects and organise events such as teachers’ seminars once or twice a year in each region, in addition to delivering entrepreneurial teaching materials, tools and methods from JA Finland at the regional level.

Through the YES network, JA Finland is the main implementer in Finland. Active since 1995, JA Finland has activities on all educational levels from ABC to PhD. About 27,000 students participated in the activities in 2015, and they had 2,100 teachers involved.

Moreover, the Centre for School clubs (nowadays the Development Centre Opinkirjo), the Finnish 4H and several universities are arranging their own activities on the area.

There is also a broad cooperation between schools and institutions, on the one hand, and businesses and associations, on the other. This cooperation takes diverse forms during the different educational levels and the different phases of the process of implementing entrepreneurship in the education system: for instance through study visits, visits in schools by business-owners and company representatives, joint events, projects, and class twinning. JA Finland had 1,600 volunteers involved in their activities in 2015.

### 3.1.6 Italy

In Italy, policy initiatives in the area of entrepreneurship education are taking form with the Law no. 107 from 2015. This law changes the former optional “school-work exchange” from 2003 into a mandatory programme at the upper secondary level and in vocational school, prescribing 200 hours of school-work exchange in general upper secondary education and 400 hours in vocational education during the last three years of school.

The Ministry of Education is the main player at ministry level, acting on government directions and taking decisions on the strategy that will introduce entrepreneurship education in a systematic way in the education system. Only in a smaller scale, for the last two years (2014-2016), the Ministry of Education and the Ministry of Labour have collaborated by implementing an experimental programme on training apprenticeship in companies, for a small group of students, aged 17-19.

Other actors involved are schools and companies taking part in the school-work exchange and organisations who help implementing it. In this collaboration, the responsibility of the Ministry of Education is to provide the guidelines, while the responsibility of the schools and companies is to verify the training needs and set up the school-work project through a formal agreement. During the development of the exchange activities, a key role is played by the “internal” (education) tutor and the “external” (business) tutor. They follow the student activities during the exchange and, in some cases, they may work and cooperate with a school teacher who is specifically in charge of organising and coordinating activities of different exchange projects.

Given the high percentage of small and micro companies in Italy, a key role is also played by the business associations. These employers’ organisations are the main stakeholders to talk with when it comes to entrepreneurship education: by being extensively present in the territory, they can act as a channel between schools and small businesses, helping them to tailor the projects, giving assistance to tutors, and allowing the business to benefit from the exchange with the schools.

This change in the national priorities is helping to raise awareness about the importance of entrepreneurial skills and entrepreneurship education in general. The challenge is to avoid entrepreneurship being seen mostly, or only, associated with business and the economics discipline and to get employers as well as parents understanding the benefits that such activities have on young people’s professional future.

JA Italy has been working with schools since 2002 and it has reached more than 240,000 students.

### 3.1.7 Latvia

In Latvia, there is no specific strategy which focuses exclusively on entrepreneurship education, however there is a broader education strategy incorporating some objectives for entrepreneurship education.

Across the country, there are different initiatives on entrepreneurship education, partly coming from the ministry level, partly from private businesses but mostly through youth education institutions and NGOs. In the country, the largest provider of entrepreneurship education is Junior Achievement Latvia (JA Latvia) with initiatives for students (such as the mini-company experience at primary and secondary level) and trainings for teachers who want to be more entrepreneurial. The European Commission has recognised JA Latvia as the only positive long-term initiative in Latvia that provides methodical entrepreneurship education for youth. Other initiatives are mostly disparate and short-term projects, financed through European funds.

The "Education Development Guidelines 2014-2020" includes objectives to develop and to improve education content, some of them relating to entrepreneurship education. In the framework of education and training, the Ministry of Education and Science is responsible for the administration of EU funding in relation with these guidelines. Many other organisations have collaborated on the guidelines, for instance different trade unions of education and teachers, employers' federation, Chamber of Commerce, Student Union of Latvia, Latvian Association of Local and Regional Governments, to name a few.

Two other ministries, the Ministry of Economics and the Ministry of Welfare, are involved in measures that touch upon entrepreneurship. In the framework of an economic development-related strategy, the Ministry of Economics is thus responsible for the action programme "Entrepreneurship and Innovations", and the Ministry of Welfare is responsible for employment policies in general. The involvement and impact of the Latvian government institutions working on entrepreneurship education is decentralised, and there is no systematic cross-ministry collaboration.

Latvia has had entrepreneurship education activities since 1990, when JA Latvia was established. Since then the organisation has been working in the entrepreneurship education field and, with support from private donors and entrepreneurship experts, it has become the main player in the country. In 2015/2016 academic year JA Latvia's programmes are available to 69,087 students and 4,422 teachers in 160 JA Latvia member schools, but only 7% of them (324 teachers) actually implement JA programs. There is no governmental support that encourages the schools to do that.

### 3.1.8 Norway

Norway was among the first countries to present, approve and implement a national strategy for entrepreneurship in education and training. Back in 2004 the Government launched an action plan to be implemented throughout the country (“See the Opportunities and Make them Work - strategy for entrepreneurship in education and training”) which was then revised in 2006. The main target group was primarily those who are responsible for education at all levels from primary school to college/university. Various stakeholders, who support entrepreneurship in their sectors, could use this strategy as a comprehensive plan and overview of the work carried out on entrepreneurship in the educational system. A new action plan was then launched in 2008 with a main focus on higher education.

Today, five ministries collaborate on the strategies on entrepreneurship education: the Ministry of Education and Research, the Ministry of Local Government and Regional Development, the Ministry of Trade and Industry, Ministry of Fisheries and the Ministry of food and agriculture. In addition to these five ministries, several national entities and actors are involved as Innovation Norway, Research centre, alumni organisations, start-up organisations and private organisations/businesses.

The main network implementing entrepreneurship education programmes in Norway is organised through JA Norway with 15 national organisations including tax authorities, employers’ organisations, unions and private businesses participating. The ministries are part of the national board of directors in JA, and each year the government provides funding according to their national goals. In each of the 19 counties a similar structure is established, connected through the national structure with involvement of regional governmental authorities. On an annual basis, thousands of businesses and volunteers are involved in activities from primary to university. JA Norway, in cooperation with JA at the country level, maps all activities and provides a detailed report about progress in each school which is then used to evaluate the strategy and measure the achievements at national level year by year.

The Norwegian government encouraged and required an extensive cooperation from all these partners to achieve the goals of the strategies. The main principles for this partnerships are:

- Entrepreneurship education needs input from several sectors, and an independent organisation is more likely to be effective in organising such cooperation than the government itself.
- It is more cost effective for the government to have several partners and several ministries involved.
- Running entrepreneurship education through external partners makes the implementation more time-efficient.
- Entrepreneurship education needs input from and should not exist without support and cooperation between education and private/public sector.

### 3.1.9 Conclusions

Several similarities can be identified in the countries with a strategy implemented over some time. The main success factors seem to be:

- Close cross-ministerial cooperation and specific dedication on the area.
- Systematic engagement of and strong cooperation between the education and business sector.
- Strong engagement from organisations as employers’ organisations, unions and other national entities.
- Key role NGOs like Junior Achievement can play to implement the policies.

The four examples from Belgium/Flanders, Denmark, Finland and Norway show how the collaborative work at the ministry level can be organised and demonstrate the importance of **a cross-ministerial dedication to the entrepreneurship education agenda with the Ministry of Education in a leading role**. The more numerous the number of stakeholders from various policy domains who understand the necessity of entrepreneurship education and become involved in it, the better the effect of the combined efforts on the area.

A high emphasis on the entrepreneurship education agenda from the policy level and a policy platform are fundamental for creating a strategy on entrepreneurship education. Government provides the steering documents, recommendations and/or guidelines and thus establishes the basic central- or top-level framework to govern the development and the activities. Without such official decisions/structure from the top level, it will be very difficult to establish a unified approach and to have an impact. Basic to this work and

collaboration is to **agree on a clear agenda and on a joint vision of entrepreneurship education as key activity supporting students' personal development, active citizenship, social inclusion and employability.**

All countries highlighted that the collaboration at ministerial level not only needs to be systematic and well-structured but also to constantly seek an **intensive engagement** from the business community and other organisations that can support and strengthen dimensions in entrepreneurship education. Other key players are **educational institutions, businesses and private organisations**, as well as **local and regional authorities**. The form of the collaboration with these actors varies from country to country.

Across countries, the main implementers of the policies are usually the **JA organisations** who have an active role in engaging as many schools as possible and linking the activities with the local community. This applies to the 8 countries involved in the analysis but it is also valid in other situations. This network is the largest provider of education programmes for entrepreneurship, work readiness and financial literacy, reaching 3.5 million students in 39 countries in 2015.

In countries like Croatia, Latvia, Italy and Estonia where the strategy is not in place yet or where it was recently launched, the Ministries involved are few and there seems to be less cross-ministry collaboration. Looking at the Progression Model, some of the countries (Croatia, Latvia) are in the pre-strategy stage, where there is progress in establishing a strategy, but mainly in policy documents. Estonia and Italy have come a step further with policy reforms which contain a strategy for most education levels ready to be implemented. Estonia also has an established mechanism for cooperation between key ministries, and has defined the roles and responsibilities of the individual actors and stakeholders. On top of this, as already explained before, in Italy, Estonia and Latvia JA organisations play an important role and have activities for thousands of students. As in the Nordic area (and Belgium/Flanders), these organisations can play an important role supporting the implementation of a national strategy.

## 3.2 Contents of the Strategy

In this section, the contents of national strategies/initiatives on entrepreneurship education are presented by looking at their goals and teacher training approaches. Croatia, not having a strategy in place, is not presented in this part of the analysis.

### 3.2.1 Belgium-Flanders

Freedom of education is a constitutional right in Belgium; schools enjoy considerable autonomy in determining curriculum and teaching methods. The governing body (or school board) is responsible for one or more schools and is comparable to a board of directors in a company. They are free to choose teaching methods and are allowed to base their education on a certain philosophy or educational view. They can also determine their own curriculum and timetables as well as appoint their own staff. However, schools that want government recognition or funding must meet the attainment targets.

An essential goal of the Flemish Action Plan is that everybody, when leaving school, should have an entrepreneurial spirit. The latter is a *condicio sine qua non* for potential entrepreneurship. Everybody should be familiar with what entrepreneurship is about and be able to make career choices consciously (either towards employment or entrepreneurship).

In order to achieve those goals, it is necessary that education institutions develop an entrepreneurial culture by working with the local government, profit and non-profit organisations and businesses<sup>5</sup>. Teachers play an essential role as they should be able to facilitate entrepreneurship education in the classroom. Relevant actions, funded by the Flemish government, should therefore lead to teachers' empowerment (and meet their needs). In addition to the focus on teachers, there's a focus on higher education to eliminate obstacles for students to become entrepreneur - for example through actions informing them about the rules and regulations, making sure they acquire the competencies and certificates they need to become entrepreneur during their studies, and so on.

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<sup>5</sup> A new call supporting the creation of local partnerships promoting an entrepreneurial culture for students and youth (18-24 years) was launched in autumn 2015.

In the Plan, different frameworks are included (such as the description of an entrepreneurial profile, tools concerning entrepreneurial competencies, a progression model that indicates what aspects of entrepreneurship education are best realized on which school level, etc.). These frameworks can help when a school/teacher further develops and integrates entrepreneurship education in the institution and in the classroom.

There are two main intermediaries (Vlajo and SO&O, mentioned in paragraph 3.1.1), being 'structurally financed' by Flanders Innovation & Entrepreneurship for the next legislation period in order to bring entrepreneurship education in the classrooms. However, besides those two, experiments and new initiatives through calls and tenders can be carried out in cooperation with other stakeholders and organisations.

### 3.2.2 Denmark

The latest two national strategies (2009 and 2012) contain goals for education as well as for teacher education. After the change of government in 2015, a new strategy for entrepreneurship is underway.

The 2009 strategy focused on the whole education system and contained three main elements: 1) objectives for primary, lower and upper secondary education and higher education; 2) bringing all the supporting work together under a single organisation; 3) creating the Partnership for Education and Training in Entrepreneurship between four ministries to cooperate on the implementation of the strategy (see chapter 3.1 Actors involved – Denmark for further details).

Following the change of government in 2012, a more holistic and broader innovation strategy was published, part of which continued having a specific focus on innovation and entrepreneurship in the education system. The innovation strategy presented a wider understanding of entrepreneurship in education. Entrepreneurship programmes, courses and competitions were not considered to be enough and the ability to be innovative has become a fundamental element of all education, from primary schools to PhD. The innovation strategy incorporated the 2009 measures on entrepreneurship education and called for the Danish Foundation for Entrepreneurship (FFE) to continue its work to embed entrepreneurship in the education system.

FFE has then made a strategy for its work (2015-2020) by setting goals on three areas: 1) continue to spread entrepreneurship education in the education system; 2) ensure a higher quality of entrepreneurship education; 3) have a focus on catalysing activities. Concerning the higher quality, the goal is that a higher number of teachers continue to receive education in entrepreneurship by participating in training activities and in two new national continuing education programmes for teachers FFE has recently created. FFE also has an increased focus on measures to help young people in their transition from graduation to own start-up activities or first job through activities such as student incubators, micro funding, networking, mentor programmes, talent programmes, etc.

For implementing entrepreneurship education at different levels of the education system, FFE created a 'Progression Model for Entrepreneurship Education' in 2013, which was followed up by 'A Taxonomy of Entrepreneurship Education' in 2015. These documents provide a model with learning objectives at each educational level and explain how this kind of education unfolds as a pedagogical practice. The taxonomy uses the National Qualifications Framework to specify learning outcomes related to the broad notion of "turning ideas into action" at five educational levels.

### 3.2.3 Estonia

In Estonia the main goals of "Be enterprising", which is the name of the 2010 plan for entrepreneurship education, are: 1) awareness rising about the importance of entrepreneurship education; 2) teacher training; 3) teaching materials; 4) legal environment supporting entrepreneurship education (curricula development, etc.); 5) the provision of resources for entrepreneurship education.

Estonia also has a national strategy, "the Estonian Lifelong Learning Strategy 2020", covering all education levels, with 5 strategic goals, two of which are connected with the development of entrepreneurship education: "a change in the approach to learning" and "the concordance of lifelong learning opportunities with the needs of the labour market". "A change in the approach to learning" refers to the implementation of an approach to learning that supports each learner's individual and social development, the acquisition of learning skills, creativity and entrepreneurship at all levels and in all types of education.

The first programme, which is part of this strategy, is an EU-funded programme, the Entrepreneurship Education Programme, running from 2015-2018, beginning implementation in 2016. This programme has set the goals to develop the entrepreneurship education methodology, elaborate teaching materials, and provide in-service teacher education. The programme covers all education levels, and a special attention is on teacher education with entrepreneurship part of initial teacher training, and in the future will also be part of continuing teachers' education.

The three main principles of the programme are:

1. Entrepreneurship education must be taught systematically at all education levels.
2. Entrepreneurship education will be developed in collaboration with universities – because universities are responsible for development of teacher education.
3. It is important to spread the understanding that entrepreneurship education is not only necessary for those willing to be an entrepreneur in future, but for all people to be an active citizen, worker, etc.

In the first year, 2016, the main focus will be on elaborating methodological principles for teaching entrepreneurship education on all education levels and deciding how to monitor the implementation activities (e.g. criteria for evaluation as well as mapping and impact assessment).

### 3.2.4 Finland

In Finland, the overall aim of the strategy, "Guidelines for entrepreneurship education 2009", was to enhance the entrepreneurial spirit among Finns and to make entrepreneurship a more attractive career choice. The main contents of the guidelines are different educational goals and a specification of development priorities for all levels and types of education. In early childhood education, the focus is on learning by doing activities and the development of a range of non-cognitive skills such as interpersonal skills, courage to act, and taking responsibility. At the intermediate level there is an increasing focus on entrepreneurship as useful in work life. In vocational schools there is a focus on basic knowledge about entrepreneurship and skills to work in an entrepreneurial manner. At the higher education level there is an increased focus on entrepreneurial attitudes, knowledge and skills to work with innovation on a broad scale in the future career. Finland thus has a strong focus on learning outcomes of this type of education.

The national curriculum includes entrepreneurship as a cross-curricular theme in basic and upper-secondary level, including vocational education. In higher education, entrepreneurship education is mostly optional.

The National Core Curricula has been updated during a development process in 2014-15. And the new core curriculum, which has an even stronger emphasis on entrepreneurship education, will be introduced in all schools in August 2016. The new core curriculum underlines working skills and entrepreneurship as a multi-disciplinary approach, which impels schools to incorporate these issues in the local action plans.

The cooperation between schools and institutions, businesses and associations takes diverse forms during the different levels and phases of this process. For the pupils' periods of work experience in local businesses that are available, for instance, and it is important that they are well-planned and goal-oriented, so that the pupil has a defined task to do, is well-equipped to observe working life in practice and has a duty to report back to other pupils about the period in a genuine exchange of experiences.

Another important aspect of the 2009 Guidelines was the effort put into including entrepreneurship education in teachers' initial training, so that entrepreneurship became a compulsory component in three and elective in several teacher education institutes. The plan was also to promote entrepreneurial skills through initiatives such as recruiting more persons with an entrepreneurial background to train teachers and to give extra merit to teachers with an entrepreneurial background, so that they have an advantage when applying for a job.

The situation today is that still many teachers leave their education without having been introduced to entrepreneurship education. Therefore, the plan is to further strengthen these efforts in the future. In Finland, teachers' education is provided by universities and by polytechnics (schools of vocational teacher education), so part of this will be a focus on convincing more universities and polytechnics to make entrepreneurship education a part of teachers' education. Since these organisations are autonomous institutions in Finland, they are free to choose both the contents of the education and the curriculum. Ministries can mainly steer the development through funding and other methods.



Finland has established a progression model for entrepreneurship education, a model for implementing entrepreneurship education at different levels of the education system with learning objectives at each educational level.

### 3.2.5 Italy

With the new law making the school-work-exchange a mandatory activity, the Italian Ministry of Education has adopted the following definition of entrepreneurship education: “ability to turn ideas into action. Creativity, innovation and risk-taking, planning and managing projects, seizing opportunities which establish or contribute to social or commercial activity. Realization of entrepreneurial autonomous activity”.

The main goals of the national strategy, contained within the National Guidelines for the school-work exchange, are:

- Implementing flexible learning strategies, with a structural link between classroom learning and practical experience;
- Enriching formal education given in school with valuable competences for the job market;
- Promoting youth orientation, valuing personal vocations, individual learning styles and interests;
- Establishing a structural link between school world and business world;
- Establishing a link between educational activities at school and local cultural, social and economic development.

When schools are not able to set school-work exchanges, business simulations (Imprese Formative Simulate - IFS) are offered in upper secondary schools. Simulated business is based on a digital simulation system that allows the students to try the processes involved in a real business activity. The process includes a web portal and a simulator to foster innovation, competitiveness and entrepreneurship. The simulator allows the students to employ tools to act like an economic operator who wants to run a real business, starting from business plan preparation, through business activation, to management and commercial activities.

The expected impact, or outcomes, of a wider implementation of the school-work exchange is that students' employability and mobility will be improved and that students will get a higher degree of self-evaluation and self-orientation. The school-work exchange is also expected to generally reinforce the links between the education world and the business world.

Italy agrees that teacher training is a central issue in the field of entrepreneurship education. However, right now there is no provision for entrepreneurship education in initial teacher training in Italy. Teachers who are involved in specific projects (like the business simulation, for instance) may get some training about entrepreneurship, but usually about technical topics (e.g. business plan, financial rules, etc.) and not about what being an “entrepreneurial teacher” means.

### 3.2.6 Latvia

Latvia has no strategy in place but entrepreneurship education is included in the "Education Development Guidelines 2014-2020", which addresses all levels of education and training. The Guidelines identify tasks and measures for improved general education content, comprising entrepreneurial skills. One of the objectives is to promote the development of the individual's professional and social skills based on the values 'education for life' and 'competitiveness in the work environment'. The Guidelines include specific objectives related to the skills of pupils at primary and lower and upper secondary education ("new competencies including enterprising spirit and entrepreneurial skills") and professional competences of teachers, including entrepreneurship.

In the content of general education at primary level and lower and upper secondary level, which was decided by the government in 2013 and 2014, the learning of topics, which would foster the development of creativity and entrepreneurship skills, has been equally incorporated within other learning subjects in an integrated manner, underlining that creativity, problem-solving skills, initiative and enterprise are nowadays proved useful to everyone both in their private and in their working life.

A collaboration between vocational schools and apprenticeship/traineeship enterprises has been implemented through the 'Transfer of Innovation activity project Hansa VET' (financed under the framework of the EU Lifelong Learning Programme, Leonardo da Vinci). This collaboration is meant to promote the development of entrepreneurial skills of vocational students.

Initial teacher training is comprised by the goals in the Second Level Higher Professional Education National Standards (Bachelor education) for all study programmes. These standards provide that entrepreneurship must be included in all study programmes for the development of professional competence. The professional competence comprises innovation and project development along with financial and management competences. Continuing teacher education in entrepreneurship is moreover offered through EU projects and JA Latvia.

### 3.2.7 Norway

In the first strategic plan, "See the Opportunities and Make them Work! 2004-2008", and in their second one, "Entrepreneurship in Education and Training - from compulsory school to higher education 2009-2014", Norway has also focused on entrepreneurship education at all levels of education, as well as on teacher training.

The first plan was evaluated in 2008 and the results of the evaluation showed a major increase in the number of students involved in entrepreneurship education. Based on feedback from the informants, and previous research and statistics, the following recommendations were put forward for the continued work with entrepreneurship in education:

1. Ensure continuity in the work that is already initiated.
2. Continue the co-operation between the three involved ministries when it comes to entrepreneurship in education.
3. Strengthen the entrepreneurship competence of teachers/lecturers and school managers.
4. School-owners (county municipalities and local government) should acknowledge the importance of entrepreneurship.
5. Develop and disseminate textbooks and instruction manuals.
6. Establish a resource bank to share best practices.
7. Widen the knowledge base through research.
8. Continue to support JA Norway.
9. Further, develop the strategy plan into an action plan with allocated budget.

The evaluation of the 2008-2014 plan provides a summary of the status of entrepreneurship training and the challenges in the years to come. One important part of the project was to evaluate the Government's action plan for entrepreneurship in education and training and assess it as a political instrument by providing input on how further work on entrepreneurship training should be followed up. The purpose of the evaluation was to conduct various studies of what entrepreneurship training is, the scope of such training in lower and upper secondary education and higher education, and its effects in achieving learning objectives.

The action plan has played an important role in putting entrepreneurship on the agenda and has contributed to further development and dissemination of training. The action plan mainly includes relevant measures, and most of these have been followed up in a good manner. At the same time, entrepreneurship training is a diverse and demanding field. There are a number of challenges associated with the further work, both in higher education and lower and upper secondary education. These challenges have been addressed in the different sub-studies of the project.

In the research project, the work was based on a definition of entrepreneurship education that distinguishes between three different approaches, namely education *about* entrepreneurship, education *for* entrepreneurship and education *through* entrepreneurship. Whereas the approach with education about entrepreneurship entails learning *about* entrepreneurship as a societal phenomenon, the approach with education *for* entrepreneurship involves education and training to develop knowledge and skills that provide a basis for starting and running a company. The third approach – education *through* entrepreneurship – involves using entrepreneurial processes as tools to achieve certain learning objectives. Participation in an (entrepreneurial) process is the focus of this approach, and it is most appropriate to characterise the approach as a pedagogical method.

### 3.2.8 Conclusions

All countries that have a strategy in place for a substantial length of time (Belgium/Flanders, Denmark, Finland, and Norway) have **clear objectives for entrepreneurship for all education levels**. These objectives are adapted to the individual level or field of education and defined to fit into curricula elements. In this process, educational institutions often have autonomy of implementing entrepreneurship education as long as they comply with the National Qualification Framework or steering documents.

**All countries mention the importance of teachers' training** considered as a strategic element to bring entrepreneurship in all schools. Part of the Finnish strategy aims to involve teachers and school managers more actively in the implementation of the strategic measures. This also happens in Belgium-Flanders.

The countries with an implemented strategy have all made **entrepreneurship education available at all levels of education**. Often it is embedded in the curriculum as a **cross-curricular subject**. However, entrepreneurship education is not necessarily implemented in all schools, because schools have a wide degree of autonomy in determining teaching methods and in defining the accomplishment of teaching goals. When it comes to teacher education, most of the countries have taken measures to ensure that all **teachers receive entrepreneurship as an integral part of their initial and continuous in-service teacher training**.

In countries where the plans are more recent, the situation is different. In Italy, for instance, the Ministry of Education has implemented the school-work exchange as a compulsory element in secondary schools, but has no other measures planned which are related to entrepreneurship education per se. Estonia seems to have moved into the stage of initial strategy development. They have defined the role of schools and universities, and entrepreneurship will be introduced as a more general element at all education levels with a set of indicators to assess its implementation. This includes a focus on initial teacher training now and in continuing teacher education later. Latvia's strategy documents state that entrepreneurial skills must be part of all educations and that entrepreneurship must be included in all study programmes, including teacher training. However, many entrepreneurship education activities in Latvia are still mostly project-based and short-term and/or they are still based on the personal enthusiasm of teachers. Latvia recommends providing more support to teachers in the form of tools and training. In Croatia, at present, there are no planned measures on entrepreneurship education.

### 3.3 Model of Implementation of the Strategy

Examples of how countries have implemented their entrepreneurship education strategy will be presented in this last section of the comparative analysis. The focus will be on how to follow up and monitor the efforts when implementing the strategy; which criteria to use and how to map and assess the impact. The examples are taken from those countries where a strategy has already been implemented and a model for its evaluation defined: Belgium/Flanders, Denmark, Finland and Norway. Therefore, no information from Croatia, Estonia, Italy and Latvia are presented here.

### 3.3.1 Belgium

In Belgium-Flanders there is a very close collaboration with dedicated actors on the ministry level collaborating with a broad range of stakeholders and trying to motivate and create the best conditions for those teachers and schools who are interested in entrepreneurship education. By involving different stakeholders through many different initiatives and measures, the Flemish 'working group on entrepreneurship education' seeks to create a broad dedication to the agenda and provide the best opportunities for bottom-up approaches. Belgium-Flanders monitors, but does not assess the impact of entrepreneurship education. They register (for the moment at primary and secondary school level) how many schools, how many actions for pupils and teachers, which fields of study, and the degree of business involvement in entrepreneurship education. The aim is to determine how big the *unique* scope (without overlap) of publicly funded initiatives is and how it evolves.

As mentioned in paragraph 3.3.1 there is a partnership between Flanders Innovation & Entrepreneurship and Vlajo and SO&O to bring entrepreneurship education in schools. Both partners have a portfolio with different educational methods and programmes. Schools can sign in on their own account. Some schools are encouraged to do so through their educational networks.

Besides Vlajo and SO&O, experiments and new initiatives can be developed through calls or tenders open to every relevant actor as well as the government itself can play a (indirect) role in implementing the policy. In this way, several players and stakeholders in Flanders collaborate on both the strategy development level (through consultations) and the strategy implementation level.

Because the government in Flanders cannot impose teaching methods, the strategy used is to focus on creating possibilities for the students who are interested in entrepreneurship and making sure that the importance of entrepreneurial spirit and entrepreneurship is recognised by the schools, teachers and other stakeholders. On the other hand, by funding different initiatives concerning entrepreneurship education, the government seeks to offer sufficient support to those schools who want to integrate entrepreneurship education in their practices.

### 3.3.2 Denmark

In Denmark, gathering all activities and responsibilities within one single organisation, backed up by an inter-ministerial partnership, has proven to be a successful way to implement the strategy. The mission of the Danish Foundation for Entrepreneurship (FFE) is to spread and integrate entrepreneurship education on all levels of the education system. Therefore the organisation carries out all those activities which in some countries are spread across several actors. This organisation of the work enables FFE to harmonise initiatives and activities, to ensure a progression throughout the education system, to gain a considerable knowledge on the area and to act as the national knowledge centre on entrepreneurship education.

From the start, monitoring and evaluation was an integrated part of FFE's activities. Measures to map and assess the impact of entrepreneurship education were determined from the beginning with the purpose to fulfil strategy goals, evaluate the strategy and serve as a basis for policy decisions. The work is discussed and evaluated on an annual basis.

FFE's goals and indicators for 2015-2020 are:

1. Continue to spread entrepreneurship education in the education system. The goal is for every student to have a practical entrepreneurial experience at least once at every educational level.
2. Enhance the quality of entrepreneurship education. The goal is to assess this by measuring the number of teachers who have been certified through a continuing or further education and training within entrepreneurship teaching.
3. Increase the knowledge and create more catalysing activities. A possible and measurable indicator for this is to look at the number of students who start up their own business during, and shortly after finishing their education.

FFE is continuously working to find better methods for assessing the quality of entrepreneurship education, for instance through the development of new examination forms and tools for measuring the learning outcomes.

At the basis of FFE's work lies an extensive and long-term research about different ways of teaching entrepreneurship and the impact such education has on students at different education levels. This research activity is part of strategy's evaluation/monitoring, because it provides answers on societal effects of the strategy, now and in the years to come.

FFE's research investigates teaching entrepreneurial skills (divided into non-cognitive or enterprising skills and cognitive or business-oriented skills) and takes into account three different approaches depending on the way and the degree to which these skills are taught/trained at different education levels: teaching *about* entrepreneurship, teaching *through* entrepreneurship, and teaching *for* entrepreneurship<sup>6</sup>. Basic to this research is the understanding that in order to increase the impact and to reach the goal that every student acquire entrepreneurial key competences, entrepreneurship education must be embedded in the general education system, and not only be offered through project-based and extra-curricular programmes. This is also useful to spread the understanding that entrepreneurship as a competence is transversal, useful in every individual's life, relevant in all subjects and fields of study, not only in those related to business and starting up a company.

### 3.3.3 Finland

In Finland, at the strategic level, a broad group of actors and stakeholders in the 'Steering group on Entrepreneurship Education' was responsible for the preparation of the strategy. At the practical level, some of the many actors from this Steering group worked together or individually through networks, projects and other events. This construction ensures a continuity between the decisions taken and the actions to implement the strategic decisions. The implementation work happens to a large degree at the local and regional level.

In order to monitor or follow up on actions foreseen in the Guidelines for Entrepreneurship Education, an evaluation was carried out in 2015 by Lappeenranta University of Technology, and their evaluation underlined that all aims of the Guidelines had been fulfilled. The evaluators concluded that the main results of the completed actions were that:

- Networking between different parties involved in entrepreneurship education has intensified at the international, national, regional and local levels.
- The 17 regional resource centres (YES) have established their position and cover the whole country.
- Entrepreneurship education has entrenched itself as a solid part of the evolving core curricula and as a stronger component of school-specific curricula.
- Entrepreneurship education has been integrated more robustly into local school and business strategies and development plans.

The evaluators of the Guidelines set up suggested next steps and targets for improvement. One was to involve teachers and headmasters more in the implementation of the strategy. For example, they are already involved in developing the school curriculum and developing the regional entrepreneurship education strategies. The idea is that they not only acknowledge the strategy, but that they become actively involved in developing concrete measures. Another idea was to offer to both teachers and headmasters further possibilities for education and development. Teachers should have further education in entrepreneurship education, and headmasters should have the possibility to get experience from working life as well as further education in leadership and how an entrepreneurial organisation works.

There are no exact criteria for evaluation of the goals, but the general conclusion is that the past years of implementing entrepreneurship education in schools have resulted in a generally deeper understanding and acceptance of entrepreneurship education in Finland. It has moreover led to a discussion about the aim of education at all levels, the national curriculum framework has been reformed, new teaching approaches and open learning environments have been developed. At the higher education level, student enterprise societies have been established and there has been a higher degree of business support for students.

Evaluation and research is another part of the Finnish strategy. There is an emphasis on providing tools for teachers to evaluate their entrepreneurship education initiatives. At present, teachers have access to some

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<sup>6</sup> See annual reports (2011-2015) on *Impact of Entrepreneurship Education in Denmark* from the Danish Foundation for Entrepreneurship.

assessment tools<sup>7</sup>, but the plan is to further develop the evaluation process and methods, and to use the evaluation results in the ongoing development processes.

Research is an important area, and Finland is among the frontrunners in the field of entrepreneurship education. Lappeenranta University developed the first assessment tool for schools and teachers in Europe, and thousands of teachers use this tool in Finland. The tool is translated into several European languages, and the data gives important input to understand teachers' approach in the classroom.

JA Finland is a key partner for mapping of all schools' activities and regularly assessing teachers' methods.

### 3.3.4 Norway

Norway decided to have a regional approach in the implementation of the strategies. At each policy level, national, county and commune, they have different responsibilities in the education system. This regional approach is also reflected in the funding model, which makes the implementation less vulnerable towards political shifts, since the public funding comes from many different entities at all the policy levels. The private sector has an important role in both implementation and in funding the activities.

JA Norway runs 20 individual programmes in most of the municipalities, has activities in 1,400 schools, and has trainings for thousands of teachers and volunteers every year. In total, 230,000 students participate in the activities in 2015. About 90 % of secondary schools are involved. The annual turnover in JA Norway is approx. 12 mill €, from where 60% is public funding.

The first cooperation agreement between the Norwegian government and JA came in 2004, and the agreement clearly stated the need for research and documentation of achievement. A 5-year research programme was established from 2004 to 2009, where all constituents in entrepreneurship education were asked to evaluate progress (students, teachers, headmasters, volunteers, parents, organisations involved, etc.) Based on the documented impact, the government decided to continue to implement entrepreneurship education through JA. In total 17 research projects on the outcomes and the impact of entrepreneurship education were conducted by independent institutions between 2002 and 2011.

By tracking all students in upper secondary schools involved in entrepreneurship education, Norway and Sweden are able to do long term impact studies. Between 1998 and 2011, those two countries have done all together 5 such studies, based on a pool of several hundred thousand former students and by using control groups as a validation tool. All the studies on impact of students in upper secondary schools showed between 25 to 50 % increase in job creation among the alumni. They also showed that the alumni from the JA Company Programme have higher income and are running companies with above average employees. Their companies survive longer and have higher turnover.

These studies became an important source of information to politicians in order to secure funding for entrepreneurship education. At the national level, the 2015 evaluation acknowledged the important role of entrepreneurship education and underlines the significance of entrepreneurship in society, and the important role education can play in developing attitudes, skills, knowledge and competence for and about entrepreneurship. The report underlined that it is crucial to maintain a strong focus on entrepreneurship education both in compulsory education and higher education.

For higher education, some of the recommendations were:

- Bolstering efforts on national student competitions in business development.
- Creating a better connection between funding agencies and entrepreneurship teaching.
- Strengthening entrepreneurship courses in new areas such as health and welfare subjects, social science and primary industry.
- Bolstering the development of entrepreneurship courses aimed at women.
- Developing experience-based forms of learning (education *through* entrepreneurship).
- Seeking out more knowledge about the quality of the different courses.

For lower and upper secondary education, recommendations were:

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<sup>7</sup> For instance, the Measurement Tool for Entrepreneurship Education.

- Reviewing the basis for the entrepreneurship education and clarifying how and in which ways it will be aimed at business development and value creation, and how it will be adapted to the different levels.
- Following up the need for competence enhancement among school administrators.
- The organisation JA Norway (Ungt entreprenørskap) plays a highly important role in providing entrepreneurship courses. For this reason it is important to:
  - Continue and strengthen collaboration with the organisation.
  - That the organisation continues its work aimed at higher education, in addition to the organisation's work aimed at lower and upper secondary education.
  - That the organisation should, in particular, cooperate with teacher education institutions on competence enhancement.

Norway maps the spread of entrepreneurship education as part of the evaluation and annual activity reports from JA Norway. The impact of entrepreneurship education is assessed mainly through independent research and through different assessment tools.

### 3.3.5 Conclusions

The four countries have different ways of implementing the strategy and all have **well-established structures for collaborations on the strategic and practical levels** involving a **broad range of stakeholders**.

At different level of development, but all the countries also have a process in place for **evaluating their strategy implementation by monitoring or mapping the spread of entrepreneurship education** in their education system as well as **assessing its impact**.

Responsibilities of implementing the strategy are usually allocated to an external or to several external organisations (**outsourcing**). This has proven to be a successful way of implementing the strategy, as it allows for flexibility and a possibility to experiment, which might not be possible at the ministry level.

Mapping and assessing activities is key to provide feedback to institutions at all levels and generate awareness about the positive impact of entrepreneurship education. Usually the **evaluation of the national strategies is done by independent entities** and the outcomes of the evaluation are then used to formulate the new strategies coming up. This approach ensures an efficient use of the resources and the ability of the policy level to follow up on the measures.

Both in the implementation, monitoring and evaluation process of entrepreneurship education **JA organisations play a key role** by supporting the Ministries and following up on the goals. In some countries, together with JA, other stakeholders are involved in the whole process.

## 4. Summaries and Conclusions

The insights gathered through this comparative analysis of the strategies/plans on entrepreneurship education in eight countries (Belgium/Flanders, Croatia, Denmark, Estonia, Finland, Italy, Latvia, and Norway) provides the basis for giving **policy recommendations about success factors and key topics** that should always be covered in a national strategy on entrepreneurship education.

The analysis was done by using as a reference the developmental stages described in the Progression Model for Entrepreneurship Education Ecosystems in Europe (see Annex 1 for further details). With its description of typical features for every stage of development, the model is useful when analysing the countries' level of strategy development and implementation. Based on the experiences from the eight countries involved, the development and implementation of national strategies on entrepreneurship education is a **longer and slower process** than what described in the Progression Model. It is often based on a collaboration between many different actors at many different levels. Therefore, in many cases, it requires more than the 2-3 years suggested in the model to reach stage 2, 3 or 4.

Some of the countries involved in this analysis show features that are characteristic of the most advanced stage, called Mainstreaming. Several countries have established ongoing monitoring and assessment of entrepreneurship education. Funding mechanisms are in place. Teaching methods are being continuously

applied and refined through the assessment of impact in the national education system. All of them have established progression models. When it comes to schools and teachers, several countries have made entrepreneurship education available at every educational level, embedded in the curriculum as part of the overall teaching concept and also as separate compulsory subject at primary and secondary levels as well as in VET schools. There are initiatives to promote and strengthen the development of courses in entrepreneurship in teacher training, but no compulsory courses.

On the basis of reviewing and discussing the focus on entrepreneurship education in eight countries and combining the information collected with input from other pan-European projects and stakeholders (e.g. The Entrepreneurial School Project, The European Entrepreneurship Education Network - EE-HUB, etc.) and from the other clusters in the ICEE project (teacher training, content and tools, assessment), the following success factors can be identified as key elements to reach the most advanced level as described in the Progression Model for Entrepreneurship Education Ecosystems in Europe:

## Policy recommendation for National Governments

*National Governments should be aware of the following dimensions in order to move ahead with entrepreneurship education in a structured and efficient way:*

### **Leadership and Collaboration - Entrepreneurship education is about sectoral cooperation and involvement from private and public sector.**

- Provide a broad policy platform for the work: a cross-ministerial collaboration with the Ministry of Education in a leading role and with actors from as many public policy domains as possible.
  - Set bold goals for penetration of entrepreneurship education in each educational level.
  - Focus on entrepreneurship education as a broad concept and include social entrepreneurship, business ethics, financial education, technologies, internationalism, etc.
- Maintain strong stakeholder relations, create win-win situations, and involve internal or external stakeholders in designing, planning, implementing and evaluating policy and activity.
  - Seek broad engagement from organisations such as employers' organisations, unions and other national organisations from the financial or start-up community that can support and strengthen dimensions in entrepreneurship education.
  - Obtain strong involvement from the business sector and acknowledge the contribution from the private sector. There is an increased need to develop and maintain sustainable partnerships between the business community and education – this should be encouraged and supported by the national authorities.
  - Involve educational institutions (school management and teachers) in the work with educational initiatives and goals.
- Establish long-term national funding.
  - National budget earmarked for entrepreneurship education and funding streams to schools.
  - Consider tax incentives for businesses which support entrepreneurship education.
  - Encourage use of instruments like Erasmus+ and European Social Funds.
- Understand and recognise the key role NGOs can play as entities responsible for implementation and national support.
- Leverage entrepreneurship education as part of country's job creation strategy.
  - Establish support for start-ups at the micro-stage and create links between the start-up ecosystem and entrepreneurship education.
  - Entrepreneurship education in schools can be an important integration strategy; target schools in communities where there are large numbers of migrants.

### **Give support, work on all educational fields and set up a clear progression**

- Respect the autonomy of the educational sector; acknowledge and respect the teachers' role and responsibility.
- Leverage the entrepreneurship competence framework developed at the European level within the national qualification framework.



- Implement entrepreneurship education initiatives at all education levels and in all educational fields through a progression model and make sure these initiatives are differentiated to suit the different educational levels.
- Provide entrepreneurship education in initial teacher training as well as in continuous professional development for teachers.
- Seek out / develop user-friendly tools, methods and programmes for diverse needs at all levels for teachers and students.
- Implement quality assurance instruments.
- Include entrepreneurship education in all areas of vocational training subjects.
- Ensure career guidance for young people who want to realize their entrepreneurial ideas.

#### **Measure impact and map activity**

- Benchmark national strategies against success factors, map the spread, and measure the impact of entrepreneurship education initiatives.
- Build in measures to evaluate and monitor the national plan.
- Introduce national assessment instruments for students (and teachers).
- Ensure both the formal and informal learning pathways in EE are validated; in this way competitions, trade fairs, longterm projects in schools and other cooperations with the local community and business sector are encouraged.
- Encourage investment in impact research and longitudinal studies.

#### **Create visibility and raise awareness about entrepreneurship education**

- Promote and encourage awareness-raising activities at national level.
- Encourage initiatives that benefit students at different levels.
- Collaborate with governments in other countries in entrepreneurship education.

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## Annex 1 - A Progression Model for Entrepreneurship Education Ecosystems in Europe<sup>8</sup>

| Stage  | Pre-Strategy (based on individual initiative)  | Initial Strategy Development   | Strategy Implementation and Consolidation & Development of Practice   | Mainstreaming  |
|--|--|--|---|--|
| Timeframe  | Starting position  | 0-2 years  | c. 2-5 years  | c. 5 years +   |
| <b>National<sup>9</sup> strategy, frameworks</b> | <p>No formal strategy in place.</p> <p>Entrepreneurship education covered – if at all – in disparate policy documents.</p> <p>Little or no effective inter-ministerial cooperation.</p> <p>No or rudimentary platforms for dialogue with relevant social partners.</p> | <p>Development and promulgation of strategy, with identification and agreement of entrepreneurship education objectives and of competences, roles and responsibilities of key players.</p> <p>Mechanisms being established for cooperation between key ministries.</p> <p>Platforms being established to include wider stakeholders.</p> <p>Vision (and intended outcomes) in process of being determined, which may involve reconciling competing agendas within government and between public and private sectors etc.</p> <p>Mapping and analysis of entrepreneurship education. Good</p> | <p>Specification of learning outcomes, objectives, indicators and targets.</p> <p>Methods being developed for assessing learning outcomes; and development of appropriate qualifications.</p> <p>Regular cooperation mechanisms being embedded at various levels of system, with relative roles and responsibilities of different stakeholders clearly defined and accepted.</p> <p>Development of funding streams: allocation of dedicated resources.</p> <p>Implementation support mechanisms being put in place. Resource banks of teaching materials available.</p> <p>Dissemination and broad-based application of the</p> | <p>On-going monitoring and regular evaluation of entrepreneurship education in terms of quality of activity and learning outcomes being achieved.</p> <p>Implementation support mechanisms part of everyday teacher and school development; entrepreneurship education fully integrated into initial teacher training for every teacher.</p> <p>Continuous application and refinement of effective teaching methods.</p> <p>Robust funding mechanisms established.</p> |

<sup>8</sup> *Towards Greater Cooperation and Coherence in Entrepreneurship Education*, European Commission, 2010

<sup>9</sup> Or regional strategy and frameworks depending on governance structures.

|                 |   |   |   |   |
|-----------------|---|---|---|---|
|                 |   | <p>practice examples being identified.</p> <p>Collection of effective teaching methods and materials.</p> <p>Launching of communications campaigns to stimulate interest of business community.</p> <p>Awareness raising with teachers.</p>   | <p>effective teaching methods identified.</p> <p>Research base being developed.</p>   |   |
| <b>Schools</b>  | <p>Penetration of entrepreneurship education highly variable; much ad hoc activity. Tends to be an 'add-on' to the mainstream curriculum with emphasis on 'entrepreneurship' as running a business.</p> <p>Tends to be focused in secondary education and in specific subjects.</p> <p>No or sporadic formal assessment of learning outcomes. Use of (unaccredited) prizes and awards to recognize achievement.</p> | <p>Role of schools articulated in strategy – recognition of central role.</p> <p>Entrepreneurship education starting to be developed across the curriculum as an embedded set of competences, not just as a separate subject.</p> <p>Development of entrepreneurship education beyond secondary level especially, e.g. at primary level: and school clustering.</p> | <p>Entrepreneurship education being made available in every school, embedded within the curriculum as part of the overall teaching concept and also as a separate subject.</p> <p>Progressive establishment of partnerships with businesses in all schools (e.g. through pilots).</p> | <p>High quality entrepreneurship education being made available to every student in every phase/type of education.</p> <p>Clear linkages established between different phases/types of education.</p> <p>Progressive development of wider linkages as part of development of local entrepreneurship ecosystem.</p> <p>Learning outcomes assessed.</p> |
| <b>Teachers</b> | <p>Strong reliance on individual teacher's enthusiasm.</p> <p>Entrepreneurship education often delivered outside core school hours as extra-curricular activity.</p>  | <p>Role of teachers articulated in strategy – recognition of central role.</p> <p>Good practice examples being identified of:</p>   | <p>Teachers making increasing use of national/regional and local support mechanisms (e.g. training or exchange platforms).</p> <p>Use of pilots to spread good practice</p>   | <p>All teachers receiving entrepreneurship education as an integral part of their initial and their continuous in-service teacher training.</p>   |

|   |  |  |   |   |
|---|--|--|---|---|
|   | Teacher training very limited. No or little in-service training.   | teacher training; teaching materials.  | and increase numbers of teachers engaging with entrepreneurship education agenda.<br><br>Initial or in-service training on entrepreneurship made available to all interested teachers.  | All teachers teaching entrepreneurship education as integral part of the curriculum.  |
| <b>Regional and local authorities<sup>10</sup></b>        | Patchy involvement: some authorities involved in development of local partnerships; others not involved at all.  | (Potential) role of local authorities considered in strategy development process.<br><br>Development of good practice examples of school clusters and education-business partnerships at local level.                                    | Local authorities playing an increasingly important role in school cluster development and education-business links.  | Full participation of local authorities in organising entrepreneurship education.<br><br>Possible establishment of statutory requirement for organisation of partnerships based on municipality geography.  |
| <b>Businesses, private associations and organisations</b> | Involvement of businesses tends to be patchy, unstructured, and often reliant on individual initiative by parents.<br><br>Use of programmes developed by private organisations (e.g. JA) tends to be ad hoc on individual school basis ... but plays vital role in providing essential experiential and 'hands-on' learning. | Key role of businesses and private organisations articulated in strategy.<br><br>Businesses (increasingly) involved through social partner organisations in policy development and in delivery of entrepreneurship education in schools. | Consideration of potential to upscale the role played by businesses and private organisations in entrepreneurship education: extension and deepening of that role.<br><br>Businesses being more systematically engaged at local level – movement away from ad hoc approaches to establishment of mechanisms for brokerage and establishment of long-term, sustainable relationships with schools. | Full participation of businesses in entrepreneurship education in all schools/universities.<br><br>Businesses support for entrepreneurship education at all levels increasingly delivered through structured channels, e.g. education-business partnerships, organised brokerage. |

<sup>10</sup> The role of regional and local authorities depends on the distribution of responsibilities between tiers of government.

## Annex 2 - Questionnaire used to collect information

### Questions about National Strategies on Entrepreneurship Education

#### **FUNDAMENTAL PRINCIPLES BEHIND ENTREPRENEURSHIP EDUCATION POLICIES**

1. What fundamental choices has your country made regarding:
  - Entrepreneurship education in general
  - The way to implement entrepreneurship education in the work field
2. What are the fundamental principles behind those choices?
3. Who are the relevant actors (government and other) and what is their role?

#### **KEY COMPONENTS OF THE ENTREPRENEURSHIP EDUCATION ECOSYSTEM**

##### *National Strategy Framework*

1. Is entrepreneurship education a focus area in your country? Please give examples of specific entrepreneurship programmes.
2. Do you have a national strategy for entrepreneurship education?
3. Who are the actors involved in this field? Is there a ministerial or cross-ministerial involvement? Are other organisations involved? (Employers' organisations, Unions, etc.)
4. Are there strategic partnerships, e.g. between the business/private sector and schools, NGOs and schools, etc.?
5. Is entrepreneurship education implemented at all levels of education? (compulsory / optional)
6. What are the main goals for your national strategy?
7. What is the plan for evaluation of the strategy? Do you map the spread of entrepreneurship education? Do you assess the impact of entrepreneurship education?
8. What is your national definition of entrepreneurship?

##### *Support to Educational Institutions*

9. Is there any funding for educational institutions, or any national budget for this area?

##### *Teacher Education and Training*

10. Is entrepreneurship education a part of initial teacher training in your country? And/or are there any other means for teachers to get education/training in entrepreneurship education?
11. Is there continuing professional development for teachers on this area? (after compulsory school)
12. Do you assess teacher performance, teaching methods and materials in your country? And how?
13. Is entrepreneurship taught primarily as a method or as a discipline/subject on the different educational levels? (That is, is it embedded in other subjects or is it taught as a stand-alone subject or course?)
14. Is there any national support for this area (financial or non-financial), such as for instance a framework for networking, guidelines, promotion, programmes, rewards/awards, website, etc.?

##### *The Role of Local and Regional Authorities*

15. Are there any local/regional studies or funding of entrepreneurship education in your country?
16. Are there any regional entrepreneurship centres in your country?

##### *Involvement of Businesses and Private Associations and Organisations*

17. To which degree are businesses involved in the entrepreneurship education strategy in your country?
18. Is there any research/results of the cooperation between the business community and education in the field of entrepreneurship education?
19. Does the business sector provide any funding of projects within entrepreneurship education?

20. What are the discussion needs of the business sector? (Which focus areas is the business sector interested in and what are their channels for influence on the entrepreneurship education area?)

### **OUTCOMES, HINDRANCES AND RECOMMENDATIONS**

*To be answered by countries who have already implemented a strategy*

1. What are the most important outcomes regarding the process of establishing a national strategy on entrepreneurship education in your country?
2. And what were the hindrances to this process?
3. What are your recommendations for this process? And what were the success factors in your country regarding this process?
4. What are the lessons learned?
5. Do you have a collaboration between education Institutions, business + industry and local + national public authorities, and how has this collaboration influenced implementation of the strategy in schools?
6. What are the consequences of implementing the strategy at the compulsory school level and at the Higher Education level?

*To be answered by countries who have not yet, or only partly, implemented a strategy*

1. How far have you come in the process of establishing an entrepreneurship education strategy and what are the outcomes of your efforts so far?
2. What are the hindrances to this process?
3. What are your recommendations for this process?
4. If you have implemented entrepreneurship education initiatives in your country, what are the lessons learned from it?
5. At which educational level have you implemented entrepreneurship education initiatives, and what are the outcomes?
6. Do different stakeholders in your country (schools, business and industry, local and national public authorities) collaborate to further entrepreneurship education in your country, and what are the outcomes?

## Annex 3 - Good Practices

The ICEE Innovation Cluster on National Strategies collected information about national strategic plans or national initiatives supporting entrepreneurship education in Europe. The analysis was done by using the following criteria:

- Already in place
- International (not dependent on personalities/specific curricula/countries)
- Possible to adapt in most school environments in Europe in a short time perspective
- Specific and to the point with implementation models and criteria for evaluation

The good practices selected are (in alphabetical order):

1. A study on Entrepreneurship Education in the Nordic countries
2. Be Enterprising: a “think tank” for entrepreneurship education in Estonia
3. Entrepreneurship Education Strategy in Denmark
4. Entrepreneurship Plan and its Evaluation in Norway
5. Guidelines for Entrepreneurship Education in Finland
6. Measuring Entrepreneurship Education impact on a national level in Denmark
7. Policy use for Enterprise Education Measurement Tool
8. School-work exchange as a new paradigm in the Italian education system
9. The Flemish Action Plan on Entrepreneurial Education
10. The International Center for Entrepreneurial Studies at Strossmayer University

Each good practice is described by using a canvas template where the activity/project is described by highlighting the needs and outcomes as well as the challenges and solutions for the target group addressed by the good practice. The template also provides additional information about the implementation method, the activities and the resources needed.

### Entrepreneurship Plan and its Evaluation in Norway

★★★★☆ (4)

|  |  |  |
|--|--|--|
| <p><b>+</b> <b>Gain Creators / Outcomes</b></p> <p>With 10 years of experience in entrepreneurship education with national strategies and implementation of them at different levels, the Norwegian government initiated an in depth evaluation to learn about the effects of the plans. The</p>         | <p><b>✓</b> <b>Gains / Needs</b></p> <p>When designing a national strategy, we want to know from others if a strategy plan works, what works in the plan and potential hindrances and drivers. We also need to know about potential effective partners and implementation strategies. Do</p> |  |
| <p><b>Target Group</b></p> <p>Policy makers at the national level</p>  | <p><b>10 years of experience and two evaluations of the strategic plans can be important knowledge for countries in the process of establishing or revising their own action plans.</b></p>  | <p><b>Activities</b></p> <p>The results from the evaluations will be disseminated among the other Member States through webinars and roundtables. The ministries can use the learning from ...</p> |
| <p><b>Implementation method</b></p> <p>Not relevant. Activities depends on the national focus. The canvas can be used for sharing experience among representatives of national ministries.</p>   | <p>The two Norwegian strategic plans for entrepreneurship education (2004–2008 and 2009-2014) have played an important role in putting entrepreneurship on the agenda from primary to higher education. The evaluations show what has been achieved or not ...</p>                           | <p><b>Resources</b></p> <p>The two strategies and a summary of the evaluations are available in <a href="#">English HERE</a>. Both evaluations are done by external contractors.</p>               |
| <p><b>👍</b> <b>Pain Relievers / Solutions</b></p> <p>Two plans with different focus show different results. An independent evaluation focusing on the last plan includes recommendations and long-term evaluations of the impact in primary, secondary and higher education. Terminology is also ...</p> | <p><b>🗨️</b> <b>Pains / Challenges</b></p> <p>Entrepreneurship Education is still fresh in Europe, and we do not know much about what is working or not regarding national implementation. We can read about strategies, but few are evaluated and not much research is available ...</p>    |  |

All good practices selected by the ICEE Innovation Cluster on Teacher Training are available online at the following URL: <http://innovation-clusters.icee-eu.eu/ICEE/National-Strategies>