



Guidebook Series

How to support SME Policy
from Structural Funds.

Building Entrepreneurial Mindsets and skills in the EU

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How to support SME Policy
from Structural Funds.

Building Entrepreneurial Mindsets and skills in the EU

A Smart Guide on promoting and facilitating
entrepreneurship education for young people
with the help of EU structural funds

This guidebook has been produced by the European Commission and is based on the information gathered in a number of projects and studies executed in this field. Although the work has been carried out under the guidance of the European Commission officials, the views expressed in this document do not necessarily represent the opinion of the European Commission

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This guidebook is part of a Series. The titles published so far are :

Nr.1 Building Entrepreneurial Mindsets and Skills in the EU

Nr.2 Using standards to support growth, competitiveness and innovation

Nr.3 Facilitating Transfer of Business

Nr.4 The Smart Guide to Service Innovation

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Foreword



Evidence suggests that developing entrepreneurial mindsets is a key ingredient of endogenous growth, and a must for sustainable local and regional development and social cohesion.

The role of education in promoting entrepreneurial attitudes and behaviours is widely recognised today. Transversal competences like creativity, sense of initiative and entrepreneurship will help young people to develop their capacity to think creatively and to innovate, to develop pro-activity, flexibility, autonomy, the capacity to manage a project and to achieve results.

There is growing evidence of the positive impact of entrepreneurship education. Young people going through these programmes will develop more entrepreneurial attitudes, get a job earlier after finishing their studies and start more companies, thereby creating more jobs.

Entrepreneurship programmes provide an excellent opportunity to connect education systems with the local economy, as they are based on project work and on the voluntary participation of real entrepreneurs. Students who develop contacts with the local business community are more likely to remain in their region or in their country after completing their studies, either as employees in a local firm or as founders of their own business.

For all these reasons, we would recommend this Guide to policy makers and to all those who are involved in local development, and we encourage you to develop initiatives for education and training on entrepreneurship in your operational programs, by making use of all the resources that the EU has to offer.

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Executive Summary

1.1 Purpose of the Report

Structural Funds (in particular the ESF and the ERDF) have an important role to play in supporting concrete projects aiming to enhance the entrepreneurial mindsets, skills and attitudes of young people. However, so far not in all EU Member States this opportunity has been fully exploited. This document intends therefore to provide an indication of actions that could be usefully taken in all countries and in all regions with the support of European Structural Funds.

It presents

- a) The general rationale and status of Entrepreneurship Education in the EU
- b) A progression model on how to develop and implement various stages of evolution of Entrepreneurship Education Policy
- c) A number of good practice examples to inspire projects for the Structural Fund Operating Plans (OPs) These examples can

be found both in the illustrative boxes of Chapter 4 as well as in the Annex

This guide is mainly based on the work that the Commission carried out in the last five years - in close cooperation with national authorities - to promote education for entrepreneurship at school and university, with a particular focus on supporting the implementation of national strategies in this area.

1.2 Policy Background

The development and promotion of entrepreneurship have been strategic objectives of both the EU and Member State policies for many years, and have grown in importance over time, with the European Commission and individual Member States adopting a range of measures. Key amongst these is the building of a stronger culture of entrepreneurship and 'entrepreneurial mindsets' of European citizens, particularly young people. Education and training are key drivers in this process. All students should have access to entrepreneurship education, which should be offered in all types and at all levels of education.

The EU 2020 strategy highlights the need to embed creativity, innovation and entrepreneurship into curricula and proposes a number of actions to unleash Europe's entrepreneurial and innovative capabilities through the flagship initiatives "Youth on the Move", "An Agenda for New Skills and Jobs" and "Innovation Union". Also, in the work programme of DG Education and Culture (Education and Training 2020) enhancing innovation and creativity, including entrepreneurship, at all levels of education and training is one of four strategic objectives.¹

In 2008 the *Small Business Act for Europe* (SBA) increased the momentum for development and intensification of entrepreneurship education, stating:

'The education system, and in particular the school curricula, do not focus enough on entrepreneurship and do not provide the skills which entrepreneurs need. Children can learn to appreciate entrepreneurship from the beginning of their education.'

In Principle I, the SBA identified the need to 'foster entrepreneurial interest and talent', and in particular invited Member States to:

- stimulate innovative and entrepreneurial mindsets among young people by introducing entrepreneurship as a key competence in school curricula, particularly in general secondary education, and ensure that it is correctly reflected in teaching material;
- ensure that the importance of entrepreneurship is correctly reflected in teacher training and
- step up cooperation with the business community in order to develop systematic strategies for entrepreneurship education at all levels.

In the European reference framework 'Entrepreneurship and a sense of initiative' is one of eight key competences for lifelong learning which citizens require for their personal fulfilment, social inclusion, active citizenship and employability in a knowledge-based society. In the framework, the key competence 'sense of initiative and entrepreneurship' is defined as "an individual's ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports individuals, not only in their everyday lives at home and in society, but also in the workplace in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance".

There is growing evidence of the impact of education for entrepreneurship on individuals as well as on society and on the economy. Countries or regions with a consolidated strategy for entrepreneurship education are already measuring the impact of their efforts. The results of a recently study commissioned by the Directorate General "Enterprise and Industry" of the Commission on the impact of entrepreneurship programmes at university show clearly that entrepreneurship education makes a difference. Young people who went through entrepreneurial programmes and activities display more entrepreneurial attitudes and intentions, get a job earlier after finishing their studies, can innovate more even as employees in a firm, and start more companies.

The main sources of this document are:

- Recommendations from the "Oslo Agenda for Entrepreneurship Education in Europe", which was published by the Commission in 2007;

¹ See http://ec.europa.eu/education/lifelong-learning-policy/doc28_en.htm

- The outcomes of five High Level Reflection Panels with policy makers and key stakeholders, which took place between 2009 and 2010;
- The outcomes of two Symposia on Teacher Education in Entrepreneurship held in 2011;
- The database of good practices of the “Small Business Act for Europe”.

The report provides :

- Information on the current state of play in entrepreneurship education, especially in relation to the development of entrepreneurship education strategies and their implementation.
- A framework for mapping the area of entrepreneurship education, building strategy, priority setting and action, using a progression model developed from the discussions of the Panels.
- A ‘cook book’ of good practices which show how to address key areas within the progression model.
- Recommendations for action at all levels to support developments within EU Member States and their regions.

1.3 Developing Effective Policy and Practice: applying Good Practices to Support Progression

With a pattern of entrepreneurship education across Europe which is highly uneven, more systematic approaches are needed to ensure that it is available for every student in every school. Development is needed in every part of the entrepreneurship education ecosystem

In response to this, the report describes a progression model to help Member States and stakeholders in the field. The model provides an overall conceptual framework to set priorities for action, and identifies the ‘building blocks’ that players can put in place.

The model sets out four sequential stages from ‘pre-strategy’ through to ‘mainstreaming’ and specifies in detail the required steps to be taken for: national strategy and frameworks; schools; teachers; regional and local authorities and businesses private associations and organisations.

The model foresees:

- a conceptual shift from entrepreneurship education as ‘how to run a business’ to how to develop a general set of competences applicable in all walks of life, and experience their application at school and from being a curriculum ‘add on’ mainly available at upper secondary level to being an integral part of the curriculum at all stages;
- the development of a vision shared at national level by all the key stakeholders, with learning outcomes, and objectives, targets and indicators, with enhanced mechanisms for inter-ministerial cooperation and social partner involvement and
- the key role for developing more systematic and sustainable approaches being taken by teachers, schools, and businesses at local level supported by private associations and organisations and by local, regional and national support infrastructures involving teacher training, teaching resources and tools, mechanisms to share good practice, clusters and partnerships.

Good practice examples already exist in many areas of entrepreneurship education strategy development and implementation. To assist stakeholders, the report describes the contents of an ideal strategy. These include: cross-ministry involvement; stakeholder consultation - or even integration - to ensure wide-ranging buy-in; embedding of core competences throughout the national curriculum; high level strategic aims and objectives; dissemination of good practices; teacher training; progression opportunities and funding.

The report also examines in more detail the key actions required in the five key areas of the progression model and identifies existing good practices that can inform developments:

1. Developing the national policy framework:

Although ministries of education typically take primary responsibility, ministries of economy/enterprise/trade are also key, and cross-ministerial coordination is critical for success. Engagement with stakeholders and social partners is also critical and processes to involve them need to recognise their different backgrounds, perspectives and skills.

2. Teachers, the critical success factor:

Teachers need the right sort of support: i.e. sound research to understand teachers' conceptions of and approaches to entrepreneurship education; effective teacher training, both initial and continuing; on-going support like tools to exchange good practice, the development of banks of content, tools, methodologies and resources, the establishment of effective support networks.

3. Engaging with businesses and private associations and organisations:

Businesses are the source of the real-life examples and experiences that are essential for students' learning, i.e. visits, experiences, case studies and role models; they also underpin the work of private associations

and organisations like Junior Achievement-Young Enterprise (JA-YE) and EUROPEN which are key in providing opportunities for practical, experiential learning, like mini-enterprises and virtual companies.

4. Developing an active role for local and regional authorities:

Local and regional authorities can develop support measures for schools and teachers and are uniquely placed to take a lead role in the development of school clusters and education-business links. They can also ensure that entrepreneurship education is integrated into other local/regional strategies, e.g. social affairs (e.g. youth) and economic development.

5. Effective entrepreneurship education in schools: building the local and regional entrepreneurship education ecosystem:

The ultimate goal of the progression model is for every school at every level to be involved in entrepreneurship education, with clear linkages between levels/types of education and for wider linkages to be developed as part of local entrepreneurship ecosystems. This can begin with schools developing their own coherent approaches to entrepreneurship education, creating experiential learning environments, and then building wider linkages through clustering and partnerships.

2

The State of Play :

Entrepreneurship Education – An Uneven Landscape

Key Points from Chapter 2

There is a broad consensus between Member States on the aims and objectives of entrepreneurship education: it should develop both general competences, e.g. self-confidence, adaptability, creativity, and specific business skills.

Currently, entrepreneurship education within school systems tends to take place as an 'add-on' to the general curriculum at levels up to and including lower secondary and, from upper secondary level onwards, to be additionally available as an elective as part of a separate subject such as business or economics.

There is a vast variety of practice across Europe with most provision being developed from the bottom upwards and a lack of systematic treatment in the curriculum

Teachers and schools are key agents: an individual's chances of receiving good quality entrepreneurship education has

depended mainly on the enthusiasm of teaching staff and their ability to secure the right resources.

Private businesses and non-profit organisations like Junior-Achievement – Young Enterprise also play a key role: providing teachers with resources, and real, practical hands-on experiences.

The role of regional and local authorities is highly variable but they can play key roles as promoters and facilitators.

Moving entrepreneurship education from being an extra-curricular 'add-on' to an integral part of the curriculum involves:

- changes in teaching methods: greater use of experiential learning and a new coach/moderator role for teachers which helps students to become more independent and to take the initiative in their education
- changes in the education context, which takes students out of the classroom into

real businesses, and which establishes less hierarchical relationships within schools and

- a key role for governments: only they can bring about the required step change in the spread and quality of entrepreneurship education.

Countries vary significantly in the level of progress made to date in strategy development and implementation. Some have strategies dedicated to entrepreneurship education while others have developed entrepreneurship education policies through other vehicles, notably national curriculum frameworks; others are still at planning stage. Most policies provide broad frameworks for action, sometimes giving responsibility to other bodies for implementation, such as government agencies or private associations and organisations. There is wide variety in practice in the setting of targets for monitoring progress and in learner standards. In general, there is a significant need for Member States to embed and deepen implementation of entrepreneurship education.

2.1 Introduction

This chapter presents the current state of play in entrepreneurship education. Overall, what emerges is a very uneven landscape, across countries, municipalities, schools and indeed individual classrooms and lecture theatres.

The chapter is divided into three parts. The first part looks at the aims and objectives of entrepreneurship education as currently articulated in policy and implied in practice. On that basis, it is possible to construct and present a broad 'intervention logic' for entrepreneurship education which currently underpins activity.

In the second part of the chapter the report provides an overview of the key features of current practice in entrepreneurship education, and discusses the role of different players in those processes.

In the third part of the chapter, the report builds on the first two elements to discuss the need for action at national level.

Significantly, what this analysis shows is a consensus amongst Member States on what entrepreneurship education is trying to achieve, and also on the consequences that this means for both how it is currently delivered and the changes that will need to take place if education systems are going to come up with the goods.

2.2 The Aims and Objectives of Entrepreneurship Education

We noted in Chapter 1 that entrepreneurship education is now a prominent focus for government activity across Europe. Indeed, it is seen as a vital component in a range of policies designed to support the development of a broader, deeper and more vibrant base for small businesses: it is integral to one of the ten Principles of *A Small Business Act for Europe* and supports many of the others. But what is the exact nature of the contribution it is intended to make?

The trajectory of EU policy show that entrepreneurship education as currently articulated in policy and practice has the potential to deliver a range of effects. Ultimately, and most directly, it is seen as having the potential to contribute to the building of entrepreneurial mindsets among the young citizens of Europe, to an increase in the rates of business start-up and survival, as well as to more growth and innovation in SMEs, and hence to contribute to the growth of employment opportunities in the medium term. But since the later 1990s it has also increasingly been linked to a range of wider impacts, including those of developing more creative and innovative populations within Europe, and of assisting in the development of social cohesion and citizenship through its positive effects in building self-confidence, independence and adaptability (and thus has an important role to play in youth policy).

As it is currently being developed, entrepreneurship education is intended to develop 'entrepreneurial' competences across the entire population of pupils and students, including also adults. From this wider pool of more entrepreneurial individuals, a proportion may well go on to set up their own businesses, but all will be better equipped to respond to the increasing need for adaptability in the labour market. Entrepreneurship education will also contribute to a general development of greater understanding of business and of entrepreneurs and of more positive attitudes in the wider population to entrepreneurship. More generally people will potentially be better positioned to

make a positive contribution to society through more active citizenship. Clearly this is a very broad agenda and suggests that significant effort is required by policy makers at all levels to get to grips with understanding it and converting it into realistic policy and practice.

Figure 2.1 shows the type of competences which collectively form the desired outcomes of entrepreneurship education. At its core entrepreneurship education is concerned with turning ideas into action, and thus with creativity, innovation and risk-taking; but also included is the ability to structure, plan and manage those processes.

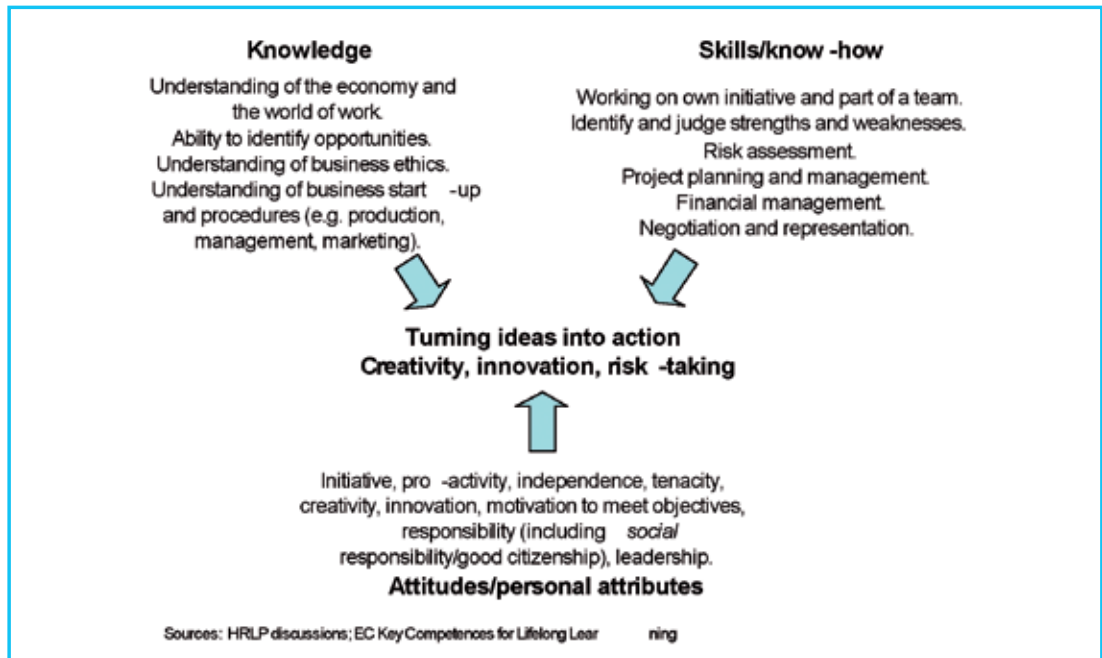


Figure 2.1 Entrepreneurship Education Key Competences/Outcome

2.3 Towards a Shared Intervention Logic

The aims and objectives discussed above are currently articulated in a variety of ways within Member States. As discussed further below, sometimes they are well articulated in the entrepreneurship strategies being developed; most often they are probably as much implied

in practice 'on the ground' in individual localities and classrooms as they are key components of overarching frameworks.

In light of this, it has been possible to elaborate an intervention logic based on these shared views.

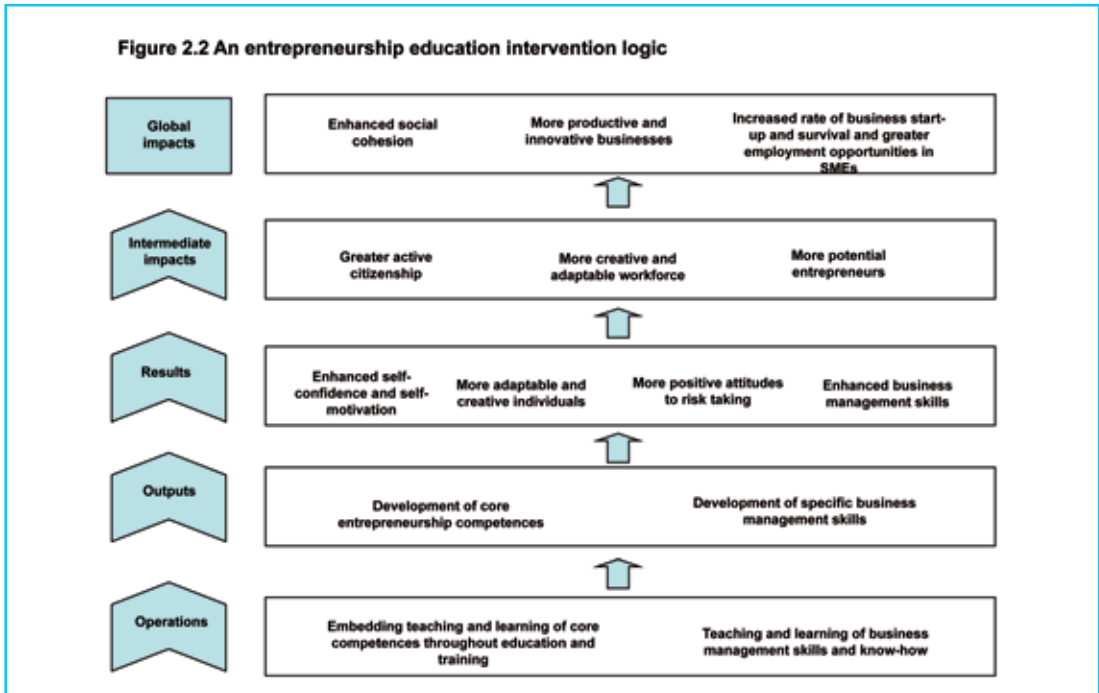


Figure 2.2 An Entrepreneurship Education Intervention Logic

In terms of the measures through which these outcomes are being – or will be – achieved, it is clear that entrepreneurship education is seen as comprising a dual approach:

- (i) It can be ‘mainstreamed’ into the curriculum, at all levels, where it tends to focus on general competences such as creativity, initiative and self-reliance.
- (ii) It can also be taught as a component of a separate subject, typically from the upper secondary level onwards. It tends to have a stronger focus on learning the skills and know-how of setting up and running a business and to be an elective rather than mandatory part of the curriculum.

The early years of education can thus develop a foundation of entrepreneurship competences onto which, later on, more specific business-related skills can be built.

In general, achieving a more structured and systematic approach to entrepreneurship

education to ensure its wider uptake means mainstreaming it within general education. In turn this entails some important adaptations in both teaching and learning. Indeed, **moving entrepreneurship education from being an extra-curricular ‘add-on’ with a ‘traditional’ focus on business practice to being an intrinsic part of the curriculum including a broad range of entrepreneurial capabilities and skills can mean nothing less than a *paradigm shift* in the education system.** This is especially the case where it needs to be embedded in general/academic education tracks, and where more traditional teaching methods are currently in use. Critical at all stages is an element of experiential learning and not just ‘traditional’ teaching methods.

The development of the range of competences shown in Figure 2.1 requires the adaptation of teaching practices and the development of the right environments within education, the latter as alternatives to more ‘traditional’ mainstream provision. **What matters most is less *what* is taught and more:**

how it is taught – especially through experiential learning and by breaking down the more traditional hierarchies between teachers and students so that the teacher becomes more of coach and/or moderator. Approaches such as these enable students to become more independent and to take the initiative as they learn, strengthening their ability to develop these key competences of entrepreneurship and **the context within which learning takes place** – particularly through getting students out of the traditional classroom environment to build links with the local community and to experience real businesses and also providing a school environment in which relationships are less hierarchical.

Attention thus needs to be focused on: getting the right combination of theoretical and **practical components** and removing the barriers between the worlds of business and education. The emphasis needs to be shifted away from traditional approaches towards methods that enable people to experiment and to learn about themselves. It is helpful that such developments are in tune with existing trends in education in many countries. However, in others it will undoubtedly require a significant shift in educational policy and practice.

As a consequence, entrepreneurship education covers a vast terrain in terms of intended outcomes and the means envisioned to achieve it. Careful consideration will need to be given to how to start the long-term process of change – much of it quite radical – through the identification of priorities and achievable steps.

2.4 Key Features of Current Practice in Entrepreneurship Education

One of the most salient features of entrepreneurship education is the **great variety in practice** across Europe – both between countries, and also within them, even at the level of individual educational establishments – whether school, vocational training provider or university – and indeed

among teachers. This reflects the fact that entrepreneurship education as we see it today has mainly been developed ‘bottom-up’, with minimal government intervention.

In part, this variation results from a varied understanding and interpretation of entrepreneurship education which is to be expected in the absence to date of a shared and/or officially formulated view within most countries of what it is supposed to achieve. It also reflects wider contextual and cultural factors which can provide both challenges and opportunities. These variations in attitudes towards entrepreneurship between Member States, along with the structure and nature of national economies, can be significant factors. In Sweden, for example, a strategy for entrepreneurship education has been developed within a cultural context where traditionally there has been a low level of interest amongst citizens in starting their own businesses, and within an economic context characterised by a predominance of large firms and a large public sector.

Given these general features, what can be said about the details of current practice in Europe? First, within a system strongly characterised by voluntarism, **teachers have often played the key role**, taking the first steps in the teaching of entrepreneurship education and in shaping current practice. This is the case even in countries where entrepreneurship education might be said to be most widely available and well developed, such as the UK² before the recent development stimulated by central government.

Secondly, **entrepreneurship education has tended not to be treated systematically in the curriculum**. Instead, it is typically an extra-curricular activity, added at the margins of mainstream education, reliant on the enthusiasm of individual teachers and schools. This has meant: (i) the focus has tended to be on topics more directly related to

² See, for instance, Bennett RJ and McCoshan A (1993) *Enterprise and Human Resource Development: Local Capacity Building*

how businesses function or on giving students a general appreciation of the world of work rather than more general competences related to entrepreneurship *per se*; (ii) it tends to consist of providing opportunities to interact with businesses rather than on developing competences like creativity and risk-taking and (iii) it tends not to be assessed as part of the mainstream curriculum: teachers and schools instead rely on in-house prizes and awards, or take part in competitions run by well-known organisations such as Junior Achievement-Young Enterprise (JA-YE), outside of mainstream qualifications.

Thirdly, the lack of systematic treatment of entrepreneurship education means that **teachers have drawn on a variety of resources** to support their teaching, **very often developed and provided by private business and/or non-profit organisations** (see below). The range of approaches, methods and tools includes using virtual simulations of business situations, practical, hands-on experience of businesses, and 'Enterprise Days/Weeks' where students develop ideas, carry out activities such as market research and design and turn their ideas into mock products or services. In all these cases, entrepreneurship education offers alternative methods to mainstream teaching practice.

Fourthly, **a significant role is played by private associations and organisations**. Most prominent amongst these are the following organisations with international profiles:

- JA-YE, which uses hands-on experiences to help young people understand the economics of life with enterprise and economic education programmes designed for young people ages 6-25 and implemented through a partnership between local businesses and schools.
- EUROPEN, the practice firms network, which supports, co-ordinates and develops services which promote and enhance the

concept of learning in and from a simulated business environment. EUROPEN's objectives are to facilitate exchange of information, provide innovative training tools to its members, promote the practice firm concept and to represent its members at different government levels and private institutions.

- JADE (in Higher Education), which fosters the development of Europe's Junior Enterprises by implementing European projects and providing the framework for cross-border co-operation on multinational studies. It organises international congresses and meetings that facilitate exchange of knowledge and experience, intercultural understanding and promote the European idea. The JADE network presently has 20,000 members in 11 EU countries and includes 150 junior enterprises.

There are also many national and regional associations with differing roles and working models in different countries. Such organisations have become large and well-established in the last two decades, and provide ready-made programmes for schools and teachers. They appear to be an especially useful resource for the development of entrepreneurship education in countries with little or no tradition of education-business links, especially the ex-communist states. More generally, they enable 'bottom-up' approaches which somewhat insulate practice at the local level from unpredictable national political changes, allowing for greater continuity.

Fifthly, whilst many programmes and simulations can be run by teachers within schools, **only businesses can provide real, practical, hands-on experience of entrepreneurship in action for students**. Unfortunately the availability of businesses that are willing and able to support entrepreneurship education is highly variable across – and even within – countries. Schools and teachers often have to depend on serendipity when it comes to making connections with local businesses; individual

parents often provide the links. However, in some areas the interaction between businesses and schools has become well structured and formalised, with schools forming education-business partnerships, perhaps under the leadership of municipalities, and involving local business organisations (e.g. chambers of commerce). For businesses, involvement represents a significant commitment, and the motivation often comes through a sense of corporate social responsibility. In many countries many small businesses would be willing to assist but lack the time to make a long-term commitment.

Sixthly, in the absence of national policy, **regional and local authorities can play an important role as promoter and facilitator**: promoting entrepreneurship education to schools, and facilitating links between education and business, as just noted, where municipalities can provide brokerage services, act as resource centres etc.

Although they frequently have statutory functions in relation to education and training, this does not guarantee that entrepreneurship education is part of local policy³.

Finally, within this overall picture, **entrepreneurship education varies across the different levels/types of education and training**.

The picture presented above is most common within **primary and general lower secondary education**. In these phases, entrepreneurship education is typically an extra-curricular activity, often involving visits to businesses or by employers into schools and framed within a theme of 'understanding the world of work'. More focused activities or projects involving mini-company type schemes tend to be rare. Generally speaking, entrepreneurship education is least prominent in the primary phase.

³ Responsibilities vary substantially. For example, in some countries local authorities have powers in relation to the curriculum whilst in others it can be minimal, limited for example to school buildings and non-teaching staff.

At **upper secondary level**, entrepreneurship education also takes place as an extra-curricular activity, but elective courses become more prominent and subjects such as business and economics can include entrepreneurship as an important component. Organised real company or mini-company experiential learning is prominent.

In **school-based initial vocational education and training (IVET)**⁴, entrepreneurship education is often incorporated into the curriculum through economics and business studies

In **higher education**, entrepreneurship is a specific subject of some first and second cycle degrees such as business and economics, and is also increasingly the subject of some specific post-graduate qualifications. Some higher education institutions (HEIs) also have specific entrepreneurship specialisations, and in some countries entrepreneurship centres have been set up in certain HEIs. The challenge in higher education is to ensure entrepreneurship competences are embedded across all courses.

2.5 The Need for Policy Action at National Level

The picture of a highly uneven landscape presented above has two sides to it. On the one hand, it is clear that Member States are by no means 'starting from scratch'. By definition, the uneven landscape contains 'fertile plains' as well as 'barren deserts'. There is much activity taking place; some of it is ambitious and the picture is not static - there is a positive direction of change towards more widespread practice. On the other hand, the variation in practice and its mainly voluntary basis means that **an individual student's chances of participating in entrepreneurship education is largely due to chance**.

The incidental and unsystematic nature of much current practice means that the quality and depth of entrepreneurship education depends

⁴ The age at which school-based IVET commences varies across EU Member States.

on: (a) whether a student happens to have a teacher and/or headteacher who is willing and able to implement entrepreneurship education and/or (b) whether teachers are able to access local businesses who are able and willing to provide learning opportunities. Although it has clearly become easier in recent years for schools and teachers to access materials and good practice for entrepreneurship education, there are still a number of obstacles which can inhibit or prevent activity and which governments shall address.

Furthermore, the experience of countries which are well advanced seems to be that, **although it is possible to develop entrepreneurship education from the 'bottom up', only governments can bring about the required step change in the spread and quality of entrepreneurship education, and a paradigm shift in education systems.** For example, in the UK a government push in 2003 followed some 20 years in which entrepreneurship education had largely been developed from the bottom upwards⁵ but it resulted in an increase in the number of schools providing enterprise education from 10 to 90% in the five years to 2008⁶.

Policy action at national level has the potential to:

- (i) tackle the obstacles standing in the way of widespread and deeper entrepreneurship education;
- (ii) establish strategic emphasis and direction and
- (iii) achieve greater coherence and structure.

Where Member States are starting from a relatively low base of activity, the increased coherence and structure that can be provided

⁵ See, for example, Bennett, RJ and McCoshan A (1993) *Enterprise and Human Resource Development: Local Capacity Building*

⁶ UK Government, Her Majesty's Treasury (2008) *Enterprise: Unlocking the UK's talent*. <http://www.hm-treasury.gov.uk>

by government intervention is particularly important.

But what is the current position vis-à-vis strategy development in EU Member States?

2.6 The State of Play in National Strategy Development

Countries vary significantly in the level of progress made to date in strategy development, around a third have produced a specific and separate national entrepreneurship education strategy document⁷.

Strategies are in preparation in a number of countries. A recent positive examples in this respect is Denmark, where four ministries launched in 2009 a national strategy for entrepreneurship education.

In a few cases, entrepreneurship education is part of national curricula (as in Finland) or does not exist at national level because the governance system is highly devolved, as in Germany.

In terms of the content of the dedicated or 'freestanding' entrepreneurship education strategies, many provide a framework within which more detailed implementation plans are worked out by other stakeholders such as regional or local authorities, or schools and teachers. In these cases, national government acts as strategic co-ordinator of a range of other agencies and stakeholders that actually undertake development and implementation work. The Swedish national strategy is a notable example of this approach.

There are also examples where entrepreneurship education policy within Member States has led to the development of more detailed strategic action plans. In the case of Belgium, for example, in 2006 the government approved the 'Ondernemend Onderwijs' plan, the Flemish Entrepreneurial Education Action Plan. The

⁷ Report "Towards Greater Cooperation and Coherence in Entrepreneurship Education", European Commission 2010.

Flemish plan includes specific actions and a timescale (2007-2009), along with allocated funding for particular elements such as the development of 'bridging projects' between education and business, and the establishment of 'mock' or 'shadow' companies involving young people in schools or colleges.⁸ Within this context funds are directly channelled to schools and/or intermediary organisations.

Regardless of the nature of national strategies, they tend to share some common elements. In general **a common trend can be observed in the current shift of national curricula from contents to competences. This provides a new opportunity for entrepreneurship to be introduced in schools as a key competence.** In relation to the overall perspective on entrepreneurship education, strategies tend to adopt a broad approach.

Thus in Norway it is not just a matter of how to support would-be entrepreneurs, but also how people who are employed can adopt an entrepreneurial attitude in their jobs or even how people can be good citizens and be innovative in their society as a whole. Such an approach views entrepreneurship education as fundamentally being about the personal qualities and attitudes of individuals (encompassing for example the ability to take the initiative, be innovative and creative, the willingness to take risks and increased self-confidence). In Sweden, there is a similarly broad appreciation of the term entrepreneurship within the National Strategy, where entrepreneurship is a dynamic and social process, where individuals, privately or in cooperation, identify possibilities and utilise them to transform ideas into practical and goal-oriented activities in a social, cultural or economic context, although increasing the number of business start-ups is also an explicit programme goal.

In terms of linking entrepreneurship education to National Qualifications Frameworks (NQFs),

⁸ It should be noted that there is no specified funding allocation covering the plan as a whole.

national level strategies tend explicitly to reference the importance of this. Likewise, the strategies developed by countries such as the Netherlands, Norway, Portugal and Sweden all place significance on developing programmes for teacher training, the key role of assessment and certification in linking to NQFs, and the role of key stakeholders at different spatial levels in implementation. To give just one example, in Austria a national strategy for teacher training is currently in preparation which identifies:

- Pre-service programmes - four Universities specialise in Entrepreneurship and Management (Graz, Vienna, Innsbruck, Linz);
- In-service programmes –regular teacher training symposiums, workshops and seminars;⁹ and
- In-service training learning – Kitzbühel Summer School for secondary level entrepreneurship education, focusing on hands-on exercises, tools and methodologies.

There are also some notable variations between strategies. **An important issue concerns the extent to which targets and indicators are developed to measure progress in implementation.** For example, the Swedish strategy, which provides a broad framework for action, does not include specific targets and indicators. However, Flanders in Belgium has been active in evaluating outcomes and impact, for example:

- Flanders District of Creativity has launched EFFECTO, an impact survey focused on youth in local secondary schools who took part in entrepreneurship education activity;• O3-Loep: "Entrepreneurial Spirit Magnifying Glass" is a screening instrument that permits measuring to what extent educational projects develop the spirit of entrepreneurship and

⁹ http://www.eesi-impulszentrum.at/index2.php?Entrepreneurship-Symposien:Symposium_in_Graz_7.5.2009

- ENTRE-mirror is a self-assessment tool to assess personal development of entrepreneurial competences.¹⁰

Differences are also evident in terms of the level of prescription in the setting of learner standards for the entrepreneurship education elements of curricula.

¹⁰ <http://publiek.syntra.be/websites/europeseprojecten/SEET/Shared%20Documents/Copie%20%20baseline%20study%20on%20Enterprise%20Education-flanders.pdf>

Despite the level of detail provided in some national strategies, **the overall picture is mostly patchy in terms of the articulation of the implementation steps needed.** This confirms the importance of the process set in motion, along with the significant role the European Commission can play in catalysing developments. Similarly, there is a significant need for further action on the part of Member States to embed and deepen the implementation of entrepreneurship education in their national contexts.

3

Towards a Progression Model for Greater Cooperation and Coherence

Key Points from Chapter 3

With a pattern of entrepreneurship education across Europe which is highly uneven, more systematic approaches are needed to ensure that it is available for every student in every school. Development is needed in every part of the entrepreneurship education 'ecosystem'.

In response to this, a progression model has been developed which:

- (a) provides an overall conceptual framework to set priorities for action and
- (b) identifies the 'building blocks' that stakeholders can put in place.

The model reflects the dominant modus operandi of current strategies which set a framework and provide direction, stimulation, encouragement and broad support for implementation whilst resting on bottom-up action.

The model sets out four sequential stages from 'pre-strategy' through to 'mainstreaming' and specifies in detail the required steps to be taken for: national strategy and frameworks; schools; teachers; regional and local authorities and businesses, private associations and organisations.

The model foresees:

- a conceptual shift from entrepreneurship education as 'how to run a business' to how to develop a general set of competences applicable in all walks of life and from being a curriculum 'add on' mainly available at upper secondary level to being an integral part of the curriculum at all stages;
- the development of a vision shared at national level by all the key stakeholders, with learning outcomes, and objectives, targets and indicators, with enhanced mechanisms for inter-ministerial cooperation and social partner involvement and

- the key role for developing more systematic and sustainable approaches being taken by teachers, schools, and businesses at local level supported by private associations and organisations and by local, regional and national support infrastructures involving teacher training, teaching resources and tools, mechanisms to share good practice, clusters and partnerships.

3.1 The Progression Model: Purpose and Rationale

In the preceding section, we looked at the current state of play in entrepreneurship education in Europe. This showed the large diversity that exists in the scale and scope of activity: countries, regions, localities and even individual schools are at different stages of development. With this in mind, it has been possible to construct a progression model. The purpose of the model is:

- (a) to provide an overall conceptual framework which can be used to set priorities for action and
- (b) to identify the ‘building blocks’ that stakeholders can put in place to advance developments in the field.

The general overall trajectory of current developments in Europe is to achieve a much higher degree of coherence and structure and a more systematic approach to entrepreneurship education. The current baseline of activity is essentially a highly ‘uneven landscape’ of entrepreneurship education activity in which any single individual’s chances of receiving good quality entrepreneurship education as an integral part of their overall education depends on where they happen to live. In some geographic areas there is excellent entrepreneurship education; in others there is little or none. Development is required across the entire entrepreneurship ‘ecosystem’ in order to move from this current position to more systematic approaches, and ultimately to full coverage of all Member States, i.e. the point where entrepreneurship education

is available in every school and for every student. The model responds to these needs by identifying effective ways in which the different elements of an entrepreneurship education ecosystem might develop. In doing so, we have had regard to the overall structure and content of current strategic approaches. One of the most important features of current strategies is that they tend to seek to provide broad frameworks for action, rather than being prescriptive. Typically they set the parameters for action. They stress the importance of entrepreneurship education, the need for it to be integrated into the curriculum as well as taught as a separate subject (depending on the educational level), and the need for it to be more widely taught and deepened. The detail of how this is to be done is largely left to schools and teachers – and perhaps regional and local authorities – hence, the importance of specific objectives amongst, and ensuring the ‘buy-in’ of, all relevant stakeholders. Essentially, then, current strategies set the framework and provide direction, stimulation, encouragement and broad support for implementation for what remains in essence a ‘bottom-up’ developmental process within a framework of shared goals.

3.2 Structure and Content of the Model

Development is needed in every part of the entrepreneurship education ecosystem. To take this into account in the model, we have identified key components of the system where action is required: national strategies and frameworks; teachers; schools; as well as businesses and private associations and organisations. Table 3.1 shows the range of developmental steps that the model foresees in each of these elements. We should stress that the model is generic, but in order to be applicable across the large variety of very different contexts that exist in Europe, it acknowledges that there is no single route forwards; rather, different mechanisms will be required in different circumstances. Following the presentation of the model in this chapter, the next chapter presents a variety of concrete good practice examples to help stakeholders take forward the model in their own context.

Stage	Pre-strategy (based on individual initiative)	Initial Strategy Development	Strategy Implementation and Consolidation & Development of Practice	Mainstreaming
<p data-bbox="221 1701 264 1809">Indicative timeframe</p> <p data-bbox="536 1707 606 1814">National^(a) strategy, frameworks</p>	<p data-bbox="228 1497 247 1638">Starting position</p> <p data-bbox="286 1334 497 1638">No formal strategy in place. Entrepreneurship education covered – if at all – in disparate policy documents. Little or no effective inter-ministerial cooperation. No or rudimentary platforms for dialogue with relevant social partners.</p>	<p data-bbox="228 1191 247 1301">0- 2 years ...</p> <p data-bbox="286 936 830 1301">Development and promulgation of strategy, with identification and agreement of entrepreneurship education objectives and of competences, roles and responsibilities of key players. Mechanisms being established for cooperation between key ministries. Platforms being established to include wider stakeholders. Vision (and intended outcomes) in process of being determined, which may involve reconciling competing agendas within government and between public and private sectors etc. Mapping and analysis of entrepreneurship education. Good practice examples being identified. Collection of effective teaching methods and materials. Launching of communications campaigns to stimulate interest of business community. Awareness raising with teachers.</p>	<p data-bbox="228 785 247 909">c. 2- 5 years ...</p> <p data-bbox="286 576 738 909">Specification of learning outcomes, objectives, indicators and targets. Methods being developed for assessing learning outcomes and development of appropriate qualifications. Regular cooperation mechanisms being embedded at various levels of system, with relative roles and responsibilities of different stakeholders clearly defined and accepted. Development of funding streams: allocation of dedicated resources. Implementation support mechanisms being put in place. Resource banks of teaching materials available. Dissemination and broad-based application of the effective teaching methods identified. Research base being developed.</p>	<p data-bbox="228 452 247 550">c. 5 years +</p> <p data-bbox="286 270 663 550">On-going monitoring and regular evaluation of entrepreneurship education in terms of quality of activity and learning outcomes being achieved. Implementation support mechanisms part of everyday teacher and school development; entrepreneurship education fully integrated into initial teacher training for every teacher. Continuous application and refinement of effective teaching methods. Robust funding mechanisms established.</p>
<p data-bbox="1027 1716 1046 1795">Schools</p>	<p data-bbox="883 1340 1165 1638">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. Tends to be focused in secondary education and in specific subjects. No or sporadic formal assessment of learning outcomes. Use of (unaccredited) prizes and awards to recognise achievement.</p>	<p data-bbox="883 968 1115 1301">Role of schools articulated in strategy – recognition of central role. Entrepreneurship education starting to be developed across the curriculum as an embedded set of competences, not just as a separate subject. Development of entrepreneurship education beyond secondary level especially, e.g. at primary level and school clustering.</p>	<p data-bbox="883 615 1192 909">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. Progressive establishment of partnerships with businesses in all schools (e.g. through pilots). Links being developed between schools at different levels, moving entrepreneurship education out of secondary schools into primary and post-secondary provision (e.g. pilots).</p>	<p data-bbox="883 243 1119 550">High quality entrepreneurship education being made available to every student in every phase/type of education. Clear linkages established between different phases/types of education. Progressive development of wider linkages as part of development of local entrepreneurship ecosystem. Learning outcomes assessed.</p>

^(a) Or regional strategy and frameworks depending on governance structures

Stage	Pre-strategy (based on individual initiative)	Initial Strategy Development	Strategy Implementation and Consolidation & Development of Practice	Mainstreaming
Teachers	<p>Strong reliance on individual teacher's enthusiasm. Entrepreneurship education often delivered outside core school hours as extra-curricular activity. Teacher training very limited. No or little in-service training.</p>	<p>Role of teachers articulated in strategy – recognition of central role. Good practice examples being identified of: teacher training; teaching materials.</p>	<p>Teachers making increasing use of national/regional and local support mechanisms (e.g. training or exchange platforms). Use of pilots to spread good practice and increase numbers of teachers engaging with entrepreneurship education agenda. Initial or in-service training on entrepreneurship made available to all interested teachers.</p>	<p>All teachers receiving entrepreneurship education as an integral part of their initial and their continuous in-service teacher training. All teachers teaching entrepreneurship education as integral part of the curriculum.</p>
Regional and local authorities ^(b)	<p>Patchy involvement: some authorities involved in development of local partnerships; others not involved at all.</p>	<p>(Potential) role of local authorities considered in strategy development process. Development of good practice examples of schools clusters and education-business partnerships at local level.</p>	<p>Local authorities playing an increasingly important role in school cluster development and education-business links.</p>	<p>Full participation of local authorities in organizing entrepreneurship education. Possible establishment of statutory requirement for organisation of partnerships based on municipality geography.</p>
Businesses, private associations and organisations	<p>Involvement of businesses tends to be patchy, unstructured, and often reliant on individual initiative by parents. Use of programmes developed by private organizations (e.g. JA-YE) tends to be ad hoc on individual school basis ... but plays vital role in providing essential experiential and 'hands-on' learning.</p>	<p>Key role of businesses and private organisations articulated in strategy. Businesses (increasingly) involved through social partner organisations in policy development and in delivery of entrepreneurship education in schools.</p>	<p>Consideration of potential to upscale the role played by businesses and private organisations in entrepreneurship education: extension and deepening of that role. 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.</p>	<p>Full participation of businesses in entrepreneurship education in all schools/universities. Businesses support for entrepreneurship education at all levels increasingly delivered through structured channels, e.g. education-business partnerships, organised brokerage.</p>

^(b) The role of regional and local authorities depends on the distribution of responsibilities between tiers of government.

The model sets out a number of stages: (i) Pre-strategy; (ii) Initial Strategy Development; (iii) Strategy Implementation and Consolidation and Development of Practice and (iv) Mainstreaming. The baseline position has been defined in terms of the status quo position that tends to pertain in the absence of government intervention to direct, lead and structure developments.

For each stage we set out a suggestion of potential timeframes. We should stress that they are designed to be indicative. At the time of writing this report Member States naturally sit in a variety of positions: some lie within the 'baseline' stage, whilst others are moving through the initial stages of strategy development. The rate of progress from these positions is likely to be variable. It is up to each Member State to determine the pace of progression, which will depend on its own particular starting point and the ease with which developments can be set in train given its own specific context. One of these for example is the degree to which space can be made in the curriculum and whether any other reform programmes are already in train, which may restrict the attention that can be directed to entrepreneurship education or conversely provide an opportunity. Further discussion of such challenges is provided below.

It should also be noted that in any Member State progress *across the different elements* of the entrepreneurship education ecosystem is unlikely to be even: it is likely to be easier to make headway in some areas than others. However, we believe that – given the experience of the more advanced Member States – the timelines are a good indication of what is possible given favourable circumstances for policy implementation¹¹.

In relation to the final stage of the model, it should be pointed out that this is open ended because one of the features of the model is

that it should build the basis for sustainable activity, for activity that is able to develop and improve on a continuous basis. The model should be able to respond to new economic and social trends as they emerge.

3.3 Summary of the Model

Looking across the model as a whole, we can provide the following summary:

3.3.1 Overall Goals

In terms of the overall aim, it is to **build a system that ultimately enables all students to receive high quality entrepreneurship education at every stage of the educational process**. As part of this, **the model envisages changes in both the concept and practice of entrepreneurship education**. As far as **concept** is concerned, the model envisages **a shift away from the tendency to equate entrepreneurship education with the practicalities of running a business to a broader definition in which it is seen as developing people who are entrepreneurial in all aspects of life**. Such a concept recognises the potential for entrepreneurship education to transform many aspects of teaching and learning, to empower students through the development of autonomy in learning, to reduce hierarchical relationships within schools, and to open up educational establishments to the outside influences of the business world.

This concept is closely linked to the change in practice which also lies at the heart of the model. In **practice** terms, the model foresees **a shift away from entrepreneurship education as an 'add-on' to the curriculum**, most commonly available in the later stages of the compulsory phase of education, **to entrepreneurship education as an integral part of the curriculum at all levels**. In such a scenario, entrepreneurship education in the early years of education – from primary through lower secondary – provides a foundation for students to take entrepreneurship as a separate subject in their later years, e.g. upper secondary and beyond.

¹¹ It is worth noting that the experience from Sweden is that it takes 15-18 months to agree on a national strategy, with more time needed for implementation.

3.3.2 The Key Stages

How these goals might be achieved is the question addressed in the stages or ‘stepping stones’ envisaged for the different components of the model. To summarise these, it is perhaps useful to distinguish between, on the one hand, the policy/strategy level, and, on the other, provision and practice.

At **policy/strategy level**¹², the model envisages the further development of national strategies and their supporting mechanisms. Especially important in this will be the development of objectives, targets and indicators, and the specification of learning outcomes. The setting of a shared vision and accompanying objectives is essential to ensuring that a common trajectory is pursued within each Member State, and to ensure that the wide variety of actions that will take place at local levels has common direction and purpose. Related to this, the definition of learning outcomes and their assessment are critical for ensuring that students are developing the entrepreneurship competences required, especially during the earlier phases of education when entrepreneurship education is embedded as a cross-curriculum activity that not only consists of theoretical learning but contains a significant element of experiential learning through projects, case studies etc. that give students a sense of accomplishment and include real-life situations. In this context, assessment is important to support progression into entrepreneurship education as a separate subject in the later stages of education, e.g. at upper secondary level. Essential to these developments will be the further enhancement of mechanisms for inter-ministerial cooperation and social partner involvement in order to provide well-structured and organised platforms for implementation and further strategy development. Together, these mechanisms will provide key means of

leading and stimulating developments ‘on the ground’.

In terms of **practice and provision**, the model envisages schools, teachers and businesses at local level, supported by private associations and organisations, playing the key role in developing more systematic approaches to entrepreneurship education. They will develop the local and regional structures and long-term relationships that will provide the foundation for the entrepreneurship education ecosystem going forwards, and determine the tailored solutions appropriate to their particular local contexts. At the same time, they will need to be supported by broad support tools developed through national/regional intervention. These include the development of teacher training, of banks of teaching resources and tools, and of mechanisms to share good practice. In this way, development across the ecosystem as a whole – at national, regional and local levels – will be facilitated.

3.4 Implications of the Model: Challenges and Opportunities Going Forwards

Implementing a national strategy in entrepreneurship education naturally faces a number of potential challenges and opportunities. In this section we examine the main ones that are likely to be encountered.

Overall, as we have noted, not only is Entrepreneurship Education a complex bundle of elements in itself but each country also faces its own specific **national context** in terms of entrepreneurship. From the enterprise side there are, for example, sizable variations in such factors as the rate of new business formation, attitudes to setting up one’s own business and the ease of starting an enterprise. From the perspective of entrepreneurship education there may also be complex issues surrounding; public attitudes to entrepreneurship; the position of entrepreneurship within national educational priorities and the attitude of the education hierarchy. When it comes to inserting entrepreneurship into school education there may be a general need to work closely with parents to develop more positive attitudes.

¹² By which we mean the level where legal responsibility lies. Typically this is the national level, but in countries with strong devolved systems of government, such as Spain and Germany, it can (also) include the regional authorities.

In the face of this, challenges at the level of national strategy will be presented in a number of areas.

3.4.1 Funding

With regard to **funding** resources for entrepreneurship education to date have tended to be outside the mainstream, taking the form of support to private organisations like Junior Achievement, or the funding of time-limited projects. Such funding streams are prone to instability. The progression model we have sketched out implies a large increase in activity, and although much of the discussion of entrepreneurship education emphasises the need for its embedding within the curriculum, the Panels have also demonstrated the value of these sorts of extra-curricular activities. This may call for a larger and more identifiable need for resources in this area. *Sources of funding* will therefore be an important question for governments going forwards: more stable and long-term funding streams will be needed to support the scale of activity required to make entrepreneurship education available in every school. To move forward one key requirement is that entrepreneurship education will need to *raise its visibility on the national political stage*. Equally there are potential roles for local and regional authorities perhaps through match-funding models, working either with the private sector and/or with European funds such as the European Social Fund (ESF) or the Lifelong Learning Programmes (LLP).

3.4.2 Development of Objectives, Indicators and Targets

Other challenges at national level will concern the **development of objectives, indicators and targets** and of tools to enable progress in implementation to be well **monitored and evaluated**. For such a complex bundle of teaching and learning elements the challenge is yet to be faced and, as we report in the next section there has not yet been much progress in this area. Good practice needs to be developed, especially where entrepreneurship competences need to be made visible.

3.4.3 Teaching Methodologies

The model involves an important shift away from traditional teaching methodologies and towards new modes which are based on a larger element of experiential learning based on real-life situations in which students take a more active involvement in their education. Through these methods students develop the ability to work and learn independently and in a self-directed, heuristic way, acquiring a sense of accomplishment and strengthened self-confidence. These ideas are not new of course and indeed this shift is in tune with a general trend in education. But coupled to entrepreneurship education they present an opportunity to reinforce the development of generic competences such as initiative, innovation, risk-taking, and creativity. For the teachers, they mean a new role: less the lecturer and more the coach or mentor. Whilst teachers may be initially suspicious of entrepreneurship education because it has tended to be linked to a simple idea of teaching students about business, this wider approach – once explained – has been shown to have wide appeal, and teachers see it as an opportunity to make changes in the way students are educated and to improve teacher-learner engagement. Nonetheless all this will take time and long-run commitment on the part of the national authorities.

3.4.4 Progression Opportunities

There will also be a challenge at national level to connect up the various types and levels of education to enable the development of **progression opportunities**: thus far most activity has been focused within types/levels of education rather than on developing bridges between them so that most provision consists of disconnected threads rather than well-structured pathways. This is a general issue facing education and training at the moment: recent work shows that although most systems do not have many structural ‘dead ends’ for students, the *use of pathways* needs to be more actively encouraged. Entrepreneurship education is no exception but the challenge is likely to be all the greater where it is embedded within the curriculum. The development of

National Qualifications Frameworks based on the learning outcomes approach of the European Qualifications Framework offers opportunities in this respect.

3.4.5 Assessment, Validation and Recognition

These tools also offer the possibility to build up **assessment, validation and recognition processes**, which are scarce at the moment within entrepreneurship education. How to assess the *learning outcomes of entrepreneurship education* is a vital issue if they are to be made visible beyond schooling and as we have noted, there is currently a reliance on prizes and awards from outside bodies. Many of these have developed a certain currency in the wider world – many have a profile in the business community – but there are issues to be addressed in developing *more systematic approaches*. Given its importance in the labour market, it is important that the recognition of entrepreneurship competences amongst businesses is supported by whatever procedures are developed.

3.4.6 School-to-Enterprise Transitions

Closely related to this, an area that has received little attention thus far is the question of school-to-work, or perhaps more accurately in this context, **school-to-enterprise transitions**. A range of mechanisms are available across Europe to support business start-ups, and there are opportunities to develop linkages between them and schools, colleges and training providers to provide clearer paths into entrepreneurship once students have reached the end of their education/training.

3.4.7 Training and Involvement of Teachers

As far as the **teaching profession** is concerned, one of the challenges will be to ensure that any systematic approach builds on the underlying enthusiasm of teachers that has largely built the base of current practice. This may be challenging: the current situation often relies on teachers' goodwill, and on their putting in extra time outside the main curriculum; making a topic systematic is likely to raise more questions regarding the availability of time and resources. There will also be a number of contextual factors

to take into account such as the ageing of the workforce in many countries and the widespread recruitment problems being faced by the sector. However, in its impact on the nature of teaching, entrepreneurship education may provide a means of developing teaching practices and environments that make the profession more attractive to new entrants. Appropriate and high quality teacher training will also be essential to support teachers.

3.4.8 Systematic Involvement of Business

Outside education, the model implies change on the side of **business** as well. The ad hoc model which has prevailed until recently has depended on the goodwill of businesses at a local level to provide opportunities to students. Systematising entrepreneurship education implies a major scaling up of the demands on business, which can be challenging, particularly in times of economic downturn. In this context, more systematic approaches to sourcing locally supportive businesses will be important to spread the demands and to ensure that – as for teachers – goodwill and enthusiasm are retained.

Experience suggests that local and regional business organisations can have an important role to play in this process, building partnerships with local and regional authorities to support and complement the work of individual schools and enterprises. This is likely to be more of a challenge in some countries than others. Germany, for example, with its long-established network of statutory chambers of commerce seems comparatively well placed compared to formerly socialist countries.

3.4.9 Systematic Involvement of Private Associations and Organisations

In relation to the **private associations and organisations** which have played such an important role in developments in many countries, an important challenge of more systematic approaches to entrepreneurship education is the issue of scaling up activities. Many of these organisations have developed considerably in recent years and now run extensive programmes of activities. Many of them, however, still struggle to sustain their

own base activities in a world where financial pressures are extreme and they have limited opportunities to capture investment capital to support new directions. Strategies in relation to entrepreneurship education will need to consider the on-going role associations should play in further development of the entrepreneurship education ecosystem, how they might be affected by rising demands, and how funding arrangements might best be developed to support their continuing work. There is fruitful avenue to pursue in this area but the challenges to be overcome probably lie more in the nature of the way the Third Sector as a whole is sustainably funded than its willingness to engage with entrepreneurship education per se¹³.

¹³ See Lloyd P.E (2007), «The Social Economy in the New Political Context»; in Noya A and E Clarence; *The Social Economy: Building Inclusive Economies*; Chapter 2, OECD, Paris

3.4.10 The Role of Local, Regional and National Authorities and of the European Commission

More generally, there is much scope to develop local/regional support for the worlds of education and business as they attempt to work together. The development of **local or regional support centres** offers the prospect for such support to be provided at a level where it can be most effectively utilised by schools, teachers and businesses.

Although many of these challenges and opportunities will benefit from the intervention of national/regional governments, there is also an opportunity for Member States to benefit from support from the **European Commission** across a variety of fronts, and these are discussed in the final chapter of this report.

4

Developing Effective Policy and Practice:

Good Practices to Support Progression

Key Points from Chapter 4

National entrepreneurship education strategies need to contain a number of key elements, including: cross-ministry involvement; stakeholder consultation to ensure wide-ranging buy-in; embedding of core competences throughout the national curriculum; high level strategic aims and objectives and accompanying monitoring systems, targets and indicators; good practices; teacher training; progression opportunities and funding.

There are five key areas of the progression model where good practices can support developments:

Developing the national policy framework: Although ministries of education typically take primary responsibility, ministries of economy/enterprise/trade are also key, and cross-ministerial coordination is critical for success. Engagement with stakeholders and social partners is also critical and processes to involve them need

to recognise their different backgrounds, perspectives and skills.

Teachers, the critical success factor: Teachers need the right sort of support: i.e. sound research to understand teachers' conceptions of and approaches to entrepreneurship education; effective teacher training, both initial and continuing; on-going support like tools to exchange good practice, the development of banks of content, tools and resources, the establishment of effective support networks.

Engaging with businesses and private associations and organisations: Businesses are the source of the real-life examples and experiences that are essential for students' learning, i.e. visits, experiences, case studies and role models; they also underpin the work private associations and organisations like JA-YE and EUROPEAN which are key in providing opportunities for practical, experiential learning, like mini-enterprises and virtual companies.

Developing an active role for local and regional authorities: Local and regional authorities can develop support measures for schools and teachers and are uniquely placed to take a lead role in the development of school clusters and education-business links. They can also ensure that entrepreneurship education is integrated into other local/regional strategies, e.g. social affairs (e.g. youth) and economic development.

Effective entrepreneurship education in schools: building the local and regional entrepreneurship education ecosystem: The ultimate goal of the progression model is for every school at every level to be involved in entrepreneurship education, with clear linkages between levels/types of education and for wider linkages to be developed as part of the development of local entrepreneurship ecosystems. This can begin with schools developing their own coherent approaches to entrepreneurship education, creating experiential learning environments, and then developing wider linkages through clustering and partnerships.

4.1 Introduction

In the preceding chapter we described a progression model which sets out a trajectory for the development of strategies in entrepreneurship education and their implementation. This chapter looks at some of the key elements of the model and identifies a range of good practices to help stakeholders take forward developments.

As we have indicated, most countries are in the early phases of the progression model. Because of this, 'how to' examples for the later stages are less common than for the early ones. This is particularly true in areas such as the setting of objectives, targets and indicators, and the establishment of monitoring and evaluation procedures. In areas like these, good practice needs to be developed and disseminated as we go forwards, and as we discuss in the

final chapter, there are important roles to be played by Member States and the European Commission in setting in place appropriate mechanisms for this. Such mechanisms have the potential to make an important contribution to how the model develops. Indeed, as we have emphasised, the model should be viewed as providing a framework, rather than a fixed course of action and in this context, all stakeholders have a role to play in shaping the way in which it evolves in the coming years. In this chapter, we look first at the key elements that are needed in a national strategy, before turning to look at good practice in the following areas:

- the national policy framework;
- teachers;
- businesses and private associations and organisations;
- local and regional authorities and
- schools and the development of local entrepreneurship education ecosystems.

In terms of the practice that needs to be developed, there is substantial overlap between these categories, and the good practice we cite in one section may also apply in others.

As we noted at the start of the report, higher education was not the main focus of the Panels but it is included as a 'horizontal' dimension, with references made as appropriate in the various sections.

4.2 Key Elements of a National Strategy

In light of the progression model, it has been possible to elaborate the main elements that would need to be included in a national strategy for entrepreneurship education. Figure 4.1 presents this in diagrammatic form, whilst Table 4.1 sets out the elements in more detail.

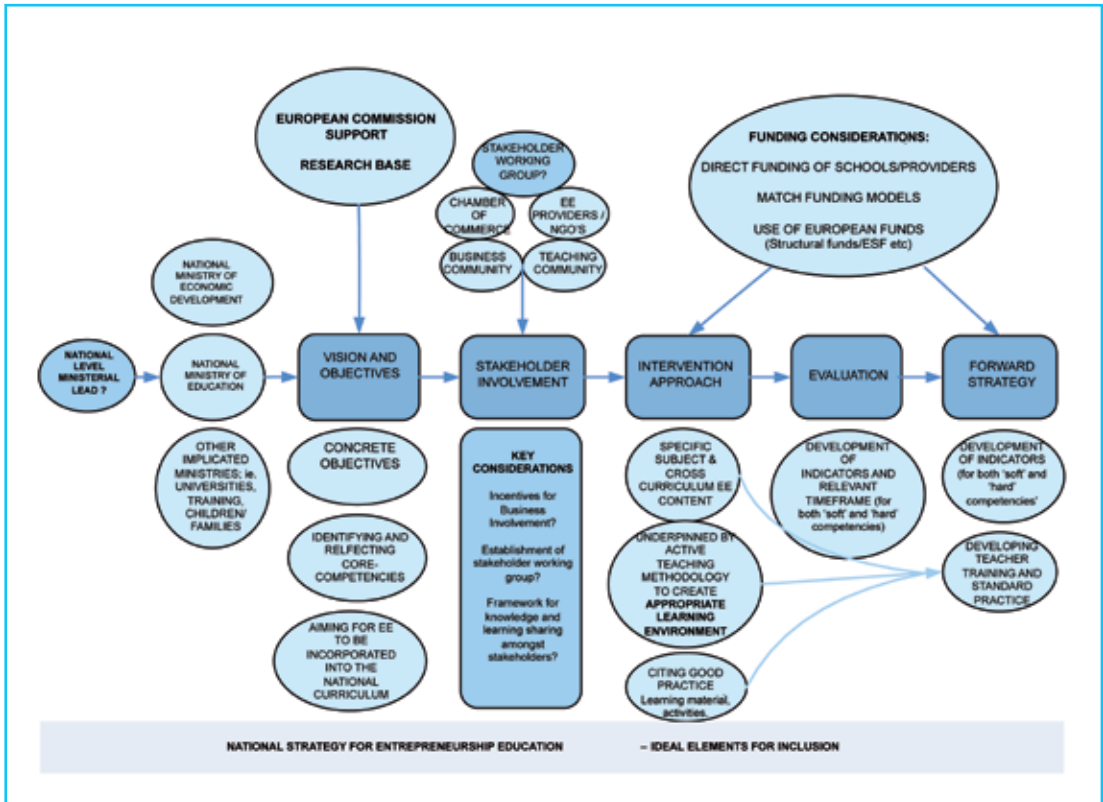


Figure 4.1 Elements of a National Strategy for Entrepreneurship Education

Table 4.1 The Main Elements of an Ideal National Entrepreneurship Education Strategy

Key Element	Detail
1. An agreed definition of terms of reference – what is Entrepreneurship Education?	Ideally this should build from the Oslo Agenda ^(c) and the Small Business Act but recognizing too that national variance may be applicable, particularly in the ‘small print’ (i.e. differences of emphasis placed according to national needs, culture, positioning etc).
2. Cross - ministry involvement as key stakeholders	Development of a national strategy should involve all relevant ministries. The strategy development process may have greater momentum if one Ministry leads the process. There is a need to involve and consult with Ministries which have an overlapping role as well as those with a direct responsibility for entrepreneurship or education itself.
3. Stakeholder consultation to establish wide-ranging buy-in and comprehension	Early consultation with representatives from NGOs, teachers and businesses is important. In particular, education interventions should be shaped around the experiences and input of the teaching community. Provisions should be put in place for active consultation early on in the process of strategy development, with a ‘stakeholder working group’ supporting this stage of the process.
4. Embedding core competences throughout the national curriculum	National strategies should encourage the inclusion of entrepreneurship education on a cross-curricular basis and where necessary within the national curriculum for each member state. Strategies should reflect core-competences acquired through experiential learning, i.e. those skills and qualities typifying enterprising behaviour, rather than laying out steps for promoting business skills and behaviour in themselves.
5. Developing high level and strategic aims and objectives	National strategies should be visionary with strategic aims and objectives covering all levels of education and having the ‘buy-in’ of all stakeholders.
6. Integrating and buttressing the strategy with identified good practice	The European Commission can play an important role in taking the lead in identifying and sharing good practice in entrepreneurship education. Good practice also has a key role in national level strategies as an effective way of demonstrating what is practically involved in the creation of effective teaching practice.
7. Training the teachers	Teacher training has a critical function to play. First it promotes the conception of entrepreneurship education as a set of core competences for all rather than being narrowly about ‘how to run a business’; experience shows teachers readily embrace this notion once explained. Second, it equips teachers for the incorporation of experiential learning into their practice and a new coaching/mentoring relationship with their students.
8. Developing a logic chain which includes indicators, outputs, outcomes and results.	Being clear about the objectives of national/regional strategies and their intended outcomes is critical for effective implementation. The elaboration of logic chains (like that presented in Figure 2.2) is an important tool. Associated with this, targets and indicators should be developed to assist in monitoring and evaluating progress. This is an area where significant development is still required even for countries that are currently relatively advanced in their strategy development and implementation.
9. Strategies demonstrating progression from primary through to tertiary (vocational and non vocational) phases	Strategies should ideally encompass the whole of the education life cycle, with lifelong learning and core competences at the heart. Strategies can indicate how implementation of entrepreneurship education may progress from horizontal cross-cutting activity (primary, lower secondary) through to specialist vertical pathways (upper secondary and beyond).
10. Resourcing the strategy	A high level national strategy should not become overly concerned with budgetary constraints. However, some strong indications of how the strategy plans to finance its objectives will avoid the common pitfall of visions failing because of a lack of resourcing to see practical implementation through at the local level.

^(c) *The Oslo Agenda for Entrepreneurship Education in Europe, European Commission 2007.*

4.3 Developing the National Policy Framework

Across the EU, national ministries and social partners play a variety of roles in the development of effective entrepreneurship education strategies and approaches, and face a number of challenges.

In terms of the role and contribution of ministries in different national contexts, in most cases (with the exception of the Netherlands and Poland), **it is the Ministry of Education that takes primary responsibility for the entrepreneurship education agenda.**¹⁴ In general, this primacy is based on the legal status of education ministries in the sense of, for example, their responsibility for developing National Qualifications Frameworks (NQFs) and for curriculum development. In line with this, a range of contributions are made by education ministries covering, for example: defining the scope and place of entrepreneurship education within the curriculum; developing a framework within which municipalities and schools can develop projects and initiatives; developing programmes to support the required training of teachers and create teaching materials and setting outcomes for learners.

While ministries of education play a central role in respect of the entrepreneurship education agenda, it is also clear that this is frequently in concert with other key ministries – in particular, economy/enterprise/trade¹⁵ ministries within Member States. Indeed, ministries with responsibility for enterprise often play an important role in policy development, and also on occasion have evidently provided a significant initial stimulus for the entrepreneurship education agenda. In Sweden, for example, stimulus for the

entrepreneurship agenda has come from the Ministry of Enterprise, Energy and Communication, being subsequently endorsed and developed by the Ministry of Education.

Strategy for Entrepreneurship in the Field of Education – The 2009 Sweden National Strategy^(d)

In the Budget Bill for 2009, the Swedish Government announced its ambition for the teaching of entrepreneurship to be an integrated theme throughout the education system. Extensive reforms of the education system are now being carried out. The Government has already taken decisions on several initiatives that support the development of entrepreneurship programmes in schools and higher education institutions. The Government will make decisions on other initiatives as the reform process continues. All these initiatives are now brought together in a strategy for entrepreneurship, published in May 2009.

The strategy consists of 11 key points, detailing action by government and stakeholders, ranging from providing greater opportunities for more in-depth studies of entrepreneurship in upper secondary school, through to mapping activity across all sectors and the development of cutting edge programmes in the fields of entrepreneurship and innovation.

Elsewhere, strategy development has been a collaborative affair. For example, Norway's strategy for entrepreneurship education was prepared through the collaboration of three Ministries: the Ministry of Research and Education, the Ministry of Local Government and Regional Development, and the Ministry of Trade and Industry. The strategy covers all levels of education and its primary purpose is to motivate and inspire educational institutions, municipalities and county municipalities to plan and firmly establish education for entrepreneurship, in collaboration with industry and other relevant

¹⁴ In the Netherlands it is the Ministry of Economic Affairs taking the lead with Education in support, and in Poland the Prime Minister's Office (Chancellery) leads.

¹⁵ Ministries taking a role alongside Education Ministries are variously named in different national contexts but in the main have a remit around enterprise and trade development, economic development and in some instances employment.

^(d) <http://www.sweden.gov.se/content/1/c6/12/99/99/e6e61481.pdf>

players in the local environment. A revised curriculum for primary and secondary education was also introduced to complement the strategy, and entrepreneurship is included in many of the syllabuses. Whereas the responsibility for coordination lies with the Ministry of Education and Research, delivery follows a decentralized approach, where the responsibility for implementation lies with educational institutions themselves.

See the Opportunities and Make Them Work: Norway's Strategy for Entrepreneurship in Education and Training 2004-2008 (revised 2006)^(e)

The purpose of Norway's strategy is to profile entrepreneurship as an educational objective and training strategy, as well as to motivate educational institutions, municipalities and county authorities to plan and anchor entrepreneurship in collaboration with trade, business and other relevant parties.

A new National Curriculum for Primary and Secondary Education and Training was introduced in the autumn of 2006 and described entrepreneurship as a means of renewing education and training. For pedagogical reasons, training in entrepreneurship should be organised differently at the different school levels. The pupils are to achieve a broad basic competence.

The strategy itself sets out a series of measures designed to develop the entrepreneurship agenda in Norway's schools, including: improving the knowledge base for teachers and educational establishments; running conferences and seminars to raise awareness; exchanges of experience and best practice; collaboration with organisations and networks outside government and international networking.

Joint policy development has also been a feature of the approach taken in the UK leading to the cross-government Enterprise Strategy '*Enterprise: Unlocking the UK's Talent*'.

Other key contributions of enterprise ministries include: facilitating links between education and business; supporting the development of entrepreneurship academies, foundations and trusts; promoting and supporting entrepreneurship initiatives for young people; providing networks or platforms to share good practice and providing financial support to external organisations that deliver programmes to schools.

Embedding Entrepreneurship Across the Curriculum: The Approach in England

In the UK, a reform has been introduced in England, for students aged 14-19. This was firstly started by making funds available to schools for pilot projects; subsequently general guidelines have been drafted by the government. The approach was to embed enterprise across the curriculum, instead of introducing a separate subject. Entrepreneurship is seen as the ability of young people to handle uncertainty, respond to change and be creative. Currently 90% of secondary schools in England offer this type of education

The contribution of enterprise ministries, and in particular their collaborative partnership with their education counterparts, can be further illustrated with reference to the Netherlands, where a 'Partnership for Entrepreneurship and Education' was established in 2005. The partnership takes in the Ministry of Economic Affairs and the Education Ministry, along with a range of social partners including education and employers' organisations.

The work taken forward by the partnership has sought to stimulate entrepreneurship in the education system, with activities including, for example, establishing a platform for

^(e) http://www.regjeringen.no/upload/KD/Vedlegg/Grunnskole/Strategiplaner/See_the_opportunities_and_make_them_work_2204-2008.pdf

good practice, and facilitating exchanges of ideas around developing new initiatives and approaches.

While education and enterprise ministries are the primary actors in entrepreneurship education across the countries as a whole, in some instances, as we have noted, **other ministries have made contributions**. This includes, for example, the Regional Development

Ministry in Norway, Science and Research Ministries in Austria, Denmark and Portugal, and Youth Ministries in Portugal, Austria and Bulgaria. While this demonstrates, in part, the differing shape and pattern of governmental responsibilities between ministries in different countries, it also highlights the importance of cross-departmental cooperation and coordination. It is also clear that advancing this agenda, and developing effective

Examples of Contributions of Different Ministries to Entrepreneurship Education		
Education ministries	Enterprise/economy/trade ministries	Other ministries
Typically the lead on entrepreneurship education strategy development Legal responsibility for education Development of National Qualifications Frameworks (learning outcomes) Setting standards, performance assessment, monitoring and evaluation Teacher training Funding development of teaching resources	Highly variable role in strategy development, ranging from initiator (though rarely), through partner to consultee. Focus on business start-ups and existing entrepreneurs Contributing to the definition of the contents of entrepreneurship education, and to the production and dissemination of pedagogical material. Supporting complementary activities, e.g. private associations and organisations, practical project-based initiatives (extra-curricula), academies, foundations, trusts Promotional role, e.g. to universities (link to innovation strategies) Inputting business skills needs into process Conduit for EU structural funds	Ministry of labour – entrepreneurship for the unemployed Ministry for regional development – incorporation of entrepreneurship education into regional strategies Ministry for youth – embedding of entrepreneurship education in strategies for young people, e.g. development of creativity and citizenship

strategies, also depends on engaging a wide range of stakeholders and social partners. This is particularly important in light of the implementation requirements that follow strategy development, but is also a key feature in the development of strategies themselves. In the Swedish context, for instance, stakeholder consultation has been used to identify issues for consideration and to shape the content of the strategy developed. This has served to highlight, for example, requirements around data sharing amongst national agencies, the need to integrate entrepreneurship across all education levels, and the need to increase the knowledge base and research undertaken around entrepreneurship education. Generally, it is important that processes to involve stakeholders recognise that they come from a variety of positions and bring a variety of perspectives and skills. Taking these into

account in building national level partnerships is a challenging process given the complexity and broad range of the entrepreneurship education agenda.

Common challenges faced by ministries and their partners include, to varying degrees:

- lack of underpinning research to guide strategy development and implementation;
- resource constraints; legal and/or constitutional barriers;
- difficulties in building the capacity, understanding and expertise of the teaching profession;
- the challenge of integrating entrepreneurship education effectively into existing curricula;

- the struggle for ‘space’ and visibility in terms of the place of the entrepreneurship education agenda against other national priorities;
- lack of underpinning and coherent strategies to aid implementation;
- difficulties in co-ordinating responses to the agenda across different Ministries and,
- developing the required political will and momentum to drive the entrepreneurship education agenda forward.

Particularly important challenges are: the need to develop the capacity of the teaching profession; the co-ordination of responses between relevant stakeholders and the integration of entrepreneurship education into existing curricula and uncertainty over which route(s) to take. Stakeholder co-ordination and engagement is a particularly difficult matter to execute to maximum effect, given the large number of stakeholders that need to be involved, e.g. higher education institutions, businesses, teachers, national ministries, NGOs and delivery organisations. **In some countries, special bodies have been created to implement or promote national strategies** partly in an effort to better deal with this issue. In Denmark, for example, different ministries jointly established a foundation for the promotion of entrepreneurship education.

While there is clearly some commonality in terms of the difficulties faced across countries, the significance and nature of these challenges also varies considerably. It is thus important that entrepreneurship strategies and approaches to implementation are sufficiently attuned to national, regional and local contexts. Countries vary in their approach to this. In countries where education is largely devolved to lower tiers of government, a regionally specific is possible within a national framework. In Spain, for example, the law introducing entrepreneurship into the school curriculum which was adopted in 2006 started to be implemented in 2009 at local level by the autonomous regions (a report on regional

activities will be published).

In this respect **it is worth highlighting two approaches which are applicable in contrasting contexts**. The Netherlands provides an example of an approach applicable in ‘mature’ contexts, i.e. where entrepreneurship education has been developing for some time as a ‘bottom-up’ activity supported by ‘top-down’ initiatives and projects, and where government activity is now being stepped up to make entrepreneurship education more widely available. Issues of assessment and monitoring are also being addressed. In contrast, Portugal provides an example of an approach where there has been comparatively little ‘spontaneous’ development of entrepreneurship education ‘on the ground’ and which has required government intervention to ‘kick start’ the system. Although tuned to the needs of different contexts, both of these approaches are very much in tune with the approach encapsulated in the progression model which is to provide a facilitative framework to encourage local action.

Contrasting Approaches to Entrepreneurship Education in Different Contexts

A Mature Context Approach: The Netherlands

The emphasis in the Netherlands is on providing policy direction, support and encouragement (through a programme approach) rather than making entrepreneurship education a compulsory part of curricula in all educational institutions. Subsidies are provided (through the National Education and Entrepreneurship Programme managed by the public agency SenterNovem) to implement entrepreneurship education across the educational phases, based on a commitment contained in the national Strategic Agenda for Higher Education, Research and Science Policy; although entrepreneurship education is not explicitly part of the curriculum. The focus is on deficits identified in the current educational system which concern the early-stage in particular,

while the approach to implementing the programme is deliberately demand-led, i.e. focusing on institutions that expressed a specific interest in starting to teach entrepreneurship education. Some schools are now offering projects for pre-school children, one example being 'My Restaurant' where classes are set up as restaurants with children making menus etc, coupled to a visit to a real restaurant in the locality. Primary schools typically start entrepreneurship education at the age of eight.

There is involvement of players at all governance levels. Along with the frameworks provided by the national government, at regional level chambers of commerce are involved in: supporting start-ups; putting entrepreneurship education on the regional agenda via sector skills organisations and simulating projects between schools and companies. At local level, local authorities can stimulate projects at local schools and with local companies and organisations.

The Netherlands is also starting to address the issue of assessment and is putting in place a National Entrepreneurship Certificate. This will apply at middle vocational training level up to and including university level and will build on certificates currently being offered by a number of HEIs (for example the Utrecht Academy of Entrepreneurship).

In terms of measurement and monitoring the impact of the Netherlands Education and Entrepreneurship Programme is measured on a two year cycle.

A Newly Developing Context Approach: Portugal

In Portugal the Education Ministry is implementing a National Education Project for Entrepreneurship Education (Projecto Nacional de Educação para o Empreendedorismo or PNEE) which aims

to establish entrepreneurship education as a cross-curricular subject within the curriculum. Within the framework of the PNEE, elementary, secondary and vocational / professional schools have been invited on a voluntary basis to develop a set of initiatives leading to the creation of entrepreneurship competencies and attitudes. In doing so, the PNEE also seeks to contribute to a continuous programme of qualifications and of learning, both for education professionals and learners.

In 2007/2008, 99 schools participated, involving 4153 pupils in both general and vocational tracks in more than 357 projects, and covering both technical and social dimensions entrepreneurship. Some of the projects are likely to be "upgraded" into real enterprises in the future. In the final trimester of 2008, a national training for trainers action was launched involving around 300 professionals from schools participating in the PNEE.

A national strategy is now being considered based on the PNEE.

As these two examples illustrate, there are important differences between countries not only in strategy development but also in how strategy is implemented. In this regard, the following examples are instructive.

The Swedish Ministry of Education and Research and the Ministry of Enterprise, Energy and Communication outlined a strategy for Entrepreneurship in the educational system taking as its starting point the need to integrate entrepreneurship throughout the education system. One initiative was the national three-year programme for entrepreneurship, which was carried out by the Swedish Agency for Economic and Regional Growth (2005-2008). In the period 2005-2007 this programme spent €13 million and funded some 100 projects (50% grants were offered and participation by schools and colleges was considerable). Results reported include the training of 4,000 teachers, the development of 50 new courses,

the participation of 140,000 students and the development of six regional entrepreneurship strategies. The Swedish Government also contributes to different organizations such as the Swedish organization *Ung Företagsamhet*, which is part of Junior Achievement Young Enterprise Europe. This organization aims at giving more than 10 percent of high school students (15,000) the possibility to start and develop their own business during a school year. Another example is Emax Nordic, which creates a common meeting place for up to 200 young entrepreneurs between the ages of 18 and 25 and organises competitions and prizes. At these events, young entrepreneurs gain inspiration, knowledge and valuable networks¹⁶. The approach of promotion and support for entrepreneurship education through targeted initiatives was also adopted in England, where between 2003 and 2005 700 secondary schools benefitted from £15 million of funding through “Enterprise Pathfinders”. The lessons derived from these pilot schools enabled the programme to be opened to all schools and informed the national guidance that was disseminated. This approach was complemented by a statutory requirement for work-related learning for 14-16 year olds, which provides a framework for promoting the “economic wellbeing” of young people. The focus is currently in secondary education, although it is the intention of the ministry responsible to extend entrepreneurship education into primary and tertiary education. There is variation in practice with respect to whether strategies seek to achieve entrepreneurship education through individual subjects or across the curriculum. In Ireland, for example, entrepreneurship is established in the curriculum as a specific subject, which has been an advantage in terms of take-up by the schools. However, Ireland is also trying further to develop a horizontal approach. In Poland entrepreneurship is included as a specific subject in the national curriculum for all secondary schools but the teaching of entrepreneurship is seen as being still too theoretical. In the Czech Republic the approach

is to introduce entrepreneurship education into the school curriculum via General Education Programmes (GEPs) within the overall framework of the national Lifelong Learning Strategy, which is designed to establish a “new approach to education”. Entrepreneurial activities are included as components of the new key competences within the National Curriculum.

In the context of primary education, projects to deliver the curriculum include practice firms and young enterprises. Some 20.4% of schools now have an entrepreneurship programme and 1.4% of the student population has so far taken part. In the Czech adult education sector a voucher system is used to support entrepreneurship education.

4.4 Developing Effective Practice

4.4.1 Teachers, the Critical Success Factor

Teachers have a critical role to play in the development of entrepreneurship education. The model discussed in Chapter 3 envisages a progression from the current position where entrepreneurship education has been highly dependent on the enthusiasm of individual teachers and their willingness and ability to carry out activities as an extra-curricular activity to one where it is systematically available to every student in every school. This requires all teachers to be teaching entrepreneurship education as an integral part of the curriculum, which in turn entails entrepreneurship education to be an intrinsic part of both initial and in-service teacher training.

The paradigm shift involved in delivering effective entrepreneurship education requires teachers to be key agents of change. Achieving this means providing teachers with the right sort of support. From the beginning it is important that there is a solid – and scientific – understanding of how teachers perceive entrepreneurship education; as we have noted, **teachers are averse to a narrow definition of entrepreneurship education as ‘how to run a business’, but warmly welcoming of the broad conception of ‘competences for life’.**

¹⁶ <http://www.emaxnordic.com>

The development of this understanding should inform the development of teacher training. Core teacher competences need to be identified, to parallel the key learning competences which have already been identified (e.g. at EU level). Entrepreneurship education means a new relationship between teachers and students in which the teacher is less of an 'instructor' and more of a coach and mentor, facilitating an individual's learning and supporting their independence and initiative. Teachers also need to incorporate a greater degree of practical, experiential learning into their teaching. In many countries these will be major shifts. Throughout Member States, there will need to be developments in both initial training and in training for staff already in post (continuing professional development). Training will also be needed for senior staff who have the potential to become leaders – or 'champions' – of entrepreneurship education within their establishments.

Sound research should also inform the development of on-going mechanisms to support teachers' continuing professional development such as tools to exchange good practice and opportunities to spend time on secondment within real enterprises. Equally important is the development of banks of content, tools and resources and the establishment of effective support networks.

Effective practice – and effective teachers – need to be recognised and given a high profile, e.g. through national awards, in order to raise the visibility of entrepreneurship education.

Key Elements in Developing the Role of Teachers

- Understanding through scientific research how teachers approach and conceive entrepreneurship education
- Developing initial teacher training and continuing professional development programme, including training to support leadership development in senior staff

- Creating and disseminating effective content, tools, methods and resources for teaching
- Establishing support networks

Understanding Teachers' Approaches to and Concept of Entrepreneurship Education: The Need for Research

We have already seen that, since teachers are central to embedding entrepreneurship education more systematically in educational institutions, their attitudes, beliefs and perceptions are important factors to take into account in the entrepreneurship education implementation phase. Indeed, experience suggests that these cannot be taken for granted. In Sweden for example the three-year national programme for entrepreneurship (2005-2008) was reported to have been enthusiastically received by teachers and others already working with entrepreneurship in education, but proved more challenging in terms of reaching teachers outside the group of core "enthusiasts". This experience highlights the need for a long-term, sustained effort, and for ensuring the role of teachers is clearly articulated at both strategic and operational levels.

It is thus important that any strategic approach to developing entrepreneurship is underpinned by a thorough understanding of the ways in which teachers understand and internalise notions of 'entrepreneurialism' and what it means in educational settings. Research carried out in Swedish schools (Berglund & Holmgren, 2007¹⁷) for example suggests that entrepreneurship education was translated by teachers and school administrators from a "narrow" understanding of business creation into a broader concept best described as an attitude, or a way of relating to the world. More specifically, teachers said that in delivering entrepreneurship

¹⁷ The Introduction of Entrepreneurship in Contemporary Swedish Education Policy: Ugly duckling or Beautiful Swan? Conference: ECER 2008, From Teaching to Learning?

education they were encouraging a way of relating to the world which is characterized by “creativity, reflexivity and power of initiative”. This is consistent with teachers’ natural interest in “learning for life”.

Research on teachers’ perspectives in Finland also suggests a number of interesting trends: teachers do not perceive entrepreneurship education as a new phenomenon and the types of activities pursued to support it are rather generic (projects, visits, experiments etc.) Teachers also emphasised that students have an inherent capacity for individual enterprise and the responsibility of the education system is to reinforce this through support and encouragement. The way different teachers conceptualise or interpret entrepreneurship education clearly has an influence on how they put it into practice, and so there is a need to provide concrete foundation guidelines. The “Entlearn.net” good practice guide and toolkit – part of wider research on entrepreneurship education, emphasises the fact that it is difficult to build a model programme for entrepreneurship education (no single approach or format) and emphasises self-organised learning and learning by doing, e.g. by integrating it into every-day operations or activities. So experiential learning may be the best way forward – entrepreneurs typically experiment then apply the knowledge gained to a real-life situation.

Quality Framework and National Standard for Enterprise Education – Centre for Education and Industry at the University of Warwick, UK

The Centre for Education and Industry at the University of Warwick, UK has developed a Quality Framework and National Standard for Enterprise Education for schools in England. The National Standard for Enterprise Education has been designed to provide a quality review process and mechanism for recognising and celebrating good practice in enterprise education. It

has been produced by a team of staff at the Centre for Education and Industry, the University of Warwick, which has specialist experience in entrepreneurship education. The National Standard quality framework is organised into five elements, each of which describes and identifies quality processes including:

- The vision of enterprise education in terms of concept and communication;
- Conducting an enterprise education audit;
- Planning and managing enterprise education;
- Delivering an enterprise education curriculum;
- Assessing and evaluating enterprise education.

Each element contains a list of requirements for schools to complete in order to meet the Standard and a brief descriptive explanation of the type of documentation which may be submitted along with specified evidence which must be included with any submission. The target audience was very broad and a wide range of schools (Primary, Secondary and Special) subsequently accessed the self review materials. Several regional teacher support networks have also used the materials as a benchmark for their provision and as the basis for designing their continuing professional development programmes. Reports suggest that teachers and their mentors value the provision of clear guidelines to support the provision of high quality enterprise education. They also respond well to the flexibility built into the requirements which allows for local priorities to be addressed whilst still complying with the basic criteria.

Developing Teacher Training

Teacher training is clearly a vital component in supporting teachers to deliver effective entrepreneurship education. The kinds of national approaches described in the previous section imply that entrepreneurship education needs to be incorporated into existing teacher training. There is a need to invest in raising the standards within the teaching professions and to attract high calibre graduates into the profession. Investment is needed in both initial teacher training and to support continuing professional development, not least for teachers who are already in post but who as yet do not teach entrepreneurship education.

In Finland, where entrepreneurship education was introduced relatively early (1994) and is incorporated across disciplines, pre-service training in entrepreneurship education for teachers is compulsory in three teacher education institutes (Kajaani Department of Teacher Education of the University of Oulu, crafts teachers' programmes in the Rauma Department of Teacher Education of the University of Turku and the Vaasa Department of Åbo Akademi University) and elective in several others. In addition, measures have been taken to recruit more people into teacher training with a background in entrepreneurship and with personal experience of entrepreneurship. All universities providing teacher education offer entrepreneurship education as elective studies for teacher trainees. These are generally on offer in faculties of economics and administrative sciences and the focus is on entrepreneurship and business know-how. Some 60 students opted for these courses in 2006-7.

In Cyprus, secondary teachers receive compulsory initial training at the University of Cyprus, where the programme includes 10 teaching periods on Entrepreneurship Education. Optional seminars are offered by the Cyprus Pedagogical Institute to teachers, school administrators and policy makers. These are organised by the Ministry of Education in cooperation with other organisations, i.e. universities. Where appropriate,

trainers draw upon cooperation with industry to ensure courses are highly relevant.

In Poland, "Dynamic Entrepreneurship" is a national programme for enhancing entrepreneurship training in Higher Education Institutions. Initiated in 2004 its aim is to develop methodologies and tools for teaching entrepreneurship courses at the academic level in Poland. The teaching methods, tools and case studies were first tested at the Leon Kozminski Academy of Entrepreneurship and Management (business school) during an EU-funded project for 120 students from 32 higher (mostly non-business) institutions in the Mazovia Region. This led to the preparation of a textbook "*Dynamic Entrepreneurship. How to Start Your Own Business*", published in 2006 and addressed to the academic community.

In Slovenia, the Centre for Vocational Education has introduced training to teach entrepreneurship for teachers from secondary vocational and professional schools. Teachers are trained through workshops focusing on how to use active learning methods and different activities in order to 'encourage and develop entrepreneurial mindsets'. In order to achieve this goal, attention is centred on the structured processes grounded on creative problem solving and critical thinking in order to trigger learning by doing, imitation and fruitful exchange of opinions. The main learning outcome of these techniques when applied in the classroom is to develop in learners an entrepreneurial spirit and corresponding skills, in the sense of individuals' general ability, with the intention to increase their efficiency both in their professional and private life. Entrepreneurship is understood as stimulating those personal abilities which are the foundation for entrepreneurial activity. Cooperation with secondary teachers has so far resulted in a number of teaching materials and handbooks on: "enterprising in the world of vocational education"; "the option of being self-employed"; "understanding the entrepreneurial way of life" and a guide for teachers on the introduction of entrepreneurship into secondary vocational and professional education.

Teacher Training in Austria

In Austria the Initiative for Teaching Entrepreneurship (IFTE)^(f) has been created to develop and provide teacher training and each year it runs a Summer School for Entrepreneurship in Kitzbühel. The course runs for one week in July and is intended for teachers from both vocational schools and colleges, and general secondary education tracks. The programme is broad, and topics include entrepreneurship in the context of educational philosophy, business ethics, and ideas creation, along with practical work on implementation, and how to use change management processes to create innovative educational organisations. There is a strong emphasis on experiential learning. The course team is drawn from across business, universities and schools, reflecting the fact that the IFTE is backed by a range of sponsors from the public and private sectors.

The use of secondments of teachers into business is a valuable means of developing teachers' competences in entrepreneurship education: they provide in-depth, hands-on experience of working in the private sector through 'learning by doing'. They can also support a range of other benefits, e.g. leadership and wider competence development, and provide opportunities for business people to spend time in education, helping to develop mutual understanding between the sectors. Less positively, they require a significant increase in commitment and resources compared to simple visits between schools and local businesses. Although they can be organised on an individual school/business basis, they are more likely to need a comparatively high degree of local organisation, perhaps involving a local/regional authority or support centre and a local business organisation to develop and manage secondment opportunities.

Golden opportunities : Closing the books a little more often – The Dutch National Centre for Curriculum Development (SLO), Netherlands

SLO, the Dutch national expertise centre for curriculum development, offers training courses to teachers, school directors and wider stakeholders who wish to develop, implement or contribute to entrepreneurship education programmes. The training for teachers consists in two consecutive courses. The core principle of SLO's training programme is that "being entrepreneurial is about behaviour".

The first one is called "Excelling" and is run over three days. The objective of this course, focused on attitudes and behaviours, is to stimulate the entrepreneurial behaviour of the teachers. Participants work on their own development as an entrepreneurial individual. The course hopes to kindle the entrepreneurial flame, by providing teachers with first-hand experience of what it means to have an entrepreneurial attitude. Participants learn to look at things differently, they must reflect on their own talent and the talents of their students, they must make contact with the 'outside world' and link entrepreneurship and education.

The second course is called "Arranging" and is run over two days. The aim of this course is for teachers to translate the entrepreneurial fire into teaching practice. Participants are taught how to arrange entrepreneurial lessons – from and for their own teaching practice, in cooperation with entrepreneurs from outside the school, with links being drawn with education frameworks and objectives. Participating teachers are expected to design their own entrepreneurship education courses, using all characteristics of entrepreneurship.

^(f) <http://www.ifte.at>

Content, Tools, Methods and Resources for Teaching

As well as teacher training, it is also critical to make available effective teaching resources and support and to provide sufficient space within the curriculum for their use. Typically teachers like to be able to adapt and develop resources, although 'off the shelf' products are also very useful for busy teaching staff. Many of these resources teachers can create at local level, using local resources through existing mechanisms (such as support centres supported by local/regional authorities, see section 4.3.3 below). But there are a number of examples where national efforts have been made to develop resources. In Slovenia, for example, a catalogue of training programmes for teachers, supported by pedagogical material, ranging from developing entrepreneurial attitudes and skills to more specific business courses, has been implemented. In Austria, the Impulse Centre of Entrepreneurship Education (EESI) *inter alia* provides approved entrepreneurship education textbooks, has created a software tool to measure personality traits and attitudes towards entrepreneurship as a teaching resource for upper secondary schools, and organises business plan competitions, as well as organising an annual entrepreneurship symposium with expert lecturers and workshops.

The virtual learning environment for entrepreneurship education – University of Turku, Finland

The Virtual Learning Environment for entrepreneurship education developed by the University of Turku, in Finland, provides an example of an attempt to create an online platform with the aim to tackle the lack of information, of learning material and of networking in teacher education in entrepreneurship. The objectives of the Virtual Learning Environment are to create dynamic models for entrepreneurship education, to enable networking between developers of entrepreneurship education

and to support teacher educators by contributing to the development of pedagogies, strategies and curricula for teacher education in entrepreneurship.

The project, which started in mid-2010, will be implemented throughout the period 2010 – 2013. In 2011, it brings together 26 partners. Early results indicate changes in strategy and curricula development in teacher education, as well as an improvement in teachers' pedagogical readiness to implement entrepreneurship education. Through the project, the Finnish network has also been strengthened.

In Scotland, Enterprising Careers provides a range of support to teachers delivering "enterprise education". This support is offered by a third party organisation, in this case the Centre for Studies in Enterprise, Career Development & Work, at the University of Strathclyde. The concept of entrepreneurship education here falls in to the category of a broad-based approach such as those we have already alluded to (in Finland for example), where the emphasis is on personal development and improving the quality of educational outcome rather than focusing mainly on entrepreneurship in the sense of starting up or running businesses. Enterprising Careers offers a range of short courses (Continuing Professional Development or CPD), including: the Enterprising Teacher, the Enterprising School and Excellence in Enterprise (which provides tools to help schools evaluate their enterprise activities).

There are also a number of "enterprise packs", including resources and tools for teachers to use and which are aimed at different levels (5-7 years, 8-11 years and 12-14 years).

A wide range of other approaches is also available across Europe. For example, in France, «*Lucy et Valentin ... créent leur entreprise!*» («Lucy and Valentin ... set up a business!») is a teaching tool that combines comic strips and serious editorial content to encourage young

people between 14 and 5 to be enterprising and think about setting up their own company. Usable either as a stand-alone module or as part of a classroom activity, it provides an interactive, dynamic, positive and pragmatic insight into business and entrepreneurship. The comic strip is divided into ten parts, one for each stage of the process that Lucy and Valentin follow to set up their own sportswear company. A similar approach has been adopted in Luxembourg, where a strip cartoon on starting a company (“Boule and Bill set up a business”) is used in all primary schools.

Virtual resources are also increasingly popular. For example, in the UK web-based resources are provided at national and regional levels by national government and local education authorities (www.enterprisevillage.org.uk/). In Poland, a key component of the national “Dynamic Entrepreneurship” programme for enhancing entrepreneurship training in Higher Education Institutions includes a dedicated web portal (www.cieslik.edu.pl), which makes available supplementary materials and tools for students, together with teaching tips and materials for lecturers.

Identifying Entrepreneurship Talents Online in Baden-Württemberg, Germany

«Talenteschmiede Baden-Württemberg» is a pilot project run by the NaturTalent Stiftung (Natural Talent Foundation) and is for students between 15 and 20 years old enrolled in schools providing a general education. The aim is to raise awareness among pupils of their natural talents and to provide guidelines for potential career paths. The rationale is that if people can apply their talents in their jobs, then they are likely to be much more effective and innovative. The first stage of the process involves pupils taking different on-line tests (those must be taken at home) which altogether take about five hours and consist of: a competence check, a check to find a potential profession, a “strength

finder” to assess personal traits and talents and finally an entrepreneur talent check. Participants also complete two written tests at home: a self-evaluation test and an assessment of their strengths completed by asking friends, parents etc. The online-tests are sent to a “talent coach” and are followed up by a one-day seminar (with maximum 12 pupils) where the participants work with the “talent coach”: discussing the results of the tests and developing their own ‘talent sheet’. Also, at the end of the seminar the students go home with five concrete proposals for future vocational training, profession or studies. In the first 18 months of the project more than 4,500 students from 170 schools have participated. Financed by the Ministry of Economy of Baden-Württemberg (as a result of its interest in entrepreneurship) and by the Federal Employment Office Baden-Württemberg (as a result of its interest in career guidance), the initiative provides a good example of joint-working at a regional level.

Along with the types of resources described above, teachers also need the space to make use of them. Unfortunately, pressures can stand in the way of this and these have tended to force entrepreneurship education into the margins of the curriculum as an extra-curricula activity. Curricula can sometimes lack flexibility. Factors such as these can make it difficult for teachers to organise innovative activities and provide their students with greater freedom. One solution to this is evident in Slovenia where up to 20% of the curriculum is specified within national the curriculum framework as being for the discretionary use of teachers: this provides an opportunity for entrepreneurship education.

Support Networks

Networks can be an important means of supporting teachers. Professional networks or communities of practice allow them to share and learn from each other’s experiences of entrepreneurship education. In Slovenia, for example, the value of such supporting frameworks in supporting the development

of entrepreneurship education has been recognised, along with the need to foster stronger cooperation and communication amongst stakeholders. This has resulted in a commitment to develop a network for teachers.

A Support Network for Educators in Irish Higher Education

In Ireland the INTRE (Irish Network of Teachers and Researchers of Entrepreneurship)⁽⁹⁾ has been instrumental in shaping the culture and practices of entrepreneurship educators across the island (in the HE sector). This is considered central to capacity building in all institutions. The UK's National Council for Graduate Entrepreneurship supports the work of the INTRE and has engaged Irish educators in its International Entrepreneurship Educators' Programme with financial assistance from Enterprise Ireland.

4.4.2 Engaging with Businesses and Private Associations and Organisations

Businesses are a vital component of entrepreneurship education strategies: they are the source of the real-life examples and experiences that are so essential for students' learning. Dialogue between entrepreneurs and educationalists is central to ensuring that entrepreneurship education is relevant and to raising students' awareness of the scope and nature of enterprise activity both in general and in their local vicinity or region.

However, business involvement has been patchy and unstructured, and this is reflected in the starting point in the progression model. There are a number of barriers to business participation, notably a lack of time and resources, a lack of incentives for engagement and an unclear understanding as to how they could most usefully become involved with entrepreneurship education. One way in which participation might be increased is through the promotion of the corporate social responsibility aspects, recognising that the development of

enterprising people serves the whole of society – business included. Participation can also bring profile and publicity benefits.

Businesses also underpin the work of the many private associations and organisations (e.g. JA-YE and EUROPEN) which have played such an important role in the development of practice to date; these bodies have strong private sector backing and are able to draw directly on concrete business practices and make them available to schools and teachers as opportunities for practical, experiential learning. To date, however, schools' and teachers' use of the expertise available from private associations and organisations has been largely ad hoc.

In aiming to ensure the availability of entrepreneurship education for every student, the progression model will entail a major scaling up of demands on businesses and private associations and organisations. Business participation is voluntary and is unlikely to support the required increases without: (i) a greater degree of structured involvement and the establishment of long-term, sustainable relationships with schools, as envisaged in the progression model and (ii) the development of innovative approaches for engaging businesses including the wider use of local partnerships and the development of brokerage functions by local business organisations (an easier task in countries like Germany with well-established organisations like chambers of commerce). Equally, it is important that business organisations are involved in strategy development and implementation at national level. Business associations and organisations, such as chambers of commerce, have valuable expertise and experience to bring to bear in introducing entrepreneurship education, and in ensuring schools and teachers take appropriate account of business needs.

There are a number of areas where the role of businesses can be developed to support the development of entrepreneurship education, as shown in the box below.

⁽⁹⁾ <http://www.intre.ie/>

Key Elements in Developing the Role of Business

- Visits, experiences, case studies and role models
- Mini-enterprises and virtual company schemes
- Private associations and organisations acting as intermediaries between the worlds of business and education

Visits, Experiences, Case Studies and Role Models

Businesses are contributing to entrepreneurship education in a variety of ways and have been doing so for many years. One of the most powerful approaches is to bring students into contact with real entrepreneurs and businesses.

Imagining an Entrepreneurial Future: The DREAM Programme

DREAM^(h) is a youth project in Belgium for 16-19 year olds that enables volunteer entrepreneurs or employers to share their experiences in the classroom or workplace. It has been developed and organized by the small business department of Brussels Management School (part of the Institut Catholique des Hautes Etudes Commerciales), known as ICHEC-PME. The four goals of DREAM are to:

1. encourage young people to think about what job they want to do, or really 'dream' of;
2. provide advice on the skills necessary to make their dream happen;
3. stimulate and teach an entrepreneurial spirit and attitude and
4. reinforce contacts between schools and business communities.

The core of DREAM is a "national day" dedicated to giving young people the opportunity to think about their future with the support of testimonials from different sectors of society and the economy (encompassing services, manufacturing, creative industries, NGOs etc). The initiative was launched on a national scale in 1999 and since then more than 101,000 students have participated.

Enterprise Days or Weeks are an increasingly popular activity, providing an opportunity for focused activity within which the conventional school timetable is often suspended and students work on assignments together. In France, for example, "*La Semaine Ecole-Entreprise*" ("School-Business Week")¹⁸, provides an opportunity for companies from a range of sectors to open their doors to students, and for entrepreneurs and employees to visit classrooms. Established in 2000, the objectives of the Week are: to enhance mutual understanding between the worlds of education and enterprise; to strengthen exchanges and partnerships and encourage new initiatives and to establish a sustainable, long-term dialogue between teachers and business leaders. The scheme is part of an annual calendar of events organized in partnership with the business sector, within the Framework Agreement of July 19 2004 between the Minister of Education and the President of the Mouvement des Entreprises de France. The Centre of Young Leaders and the Youth Association and Enterprise are also partners.

In Slovenia, the "Design Thinking School" or d.school initiative led by JAPTI, the public Agency for Entrepreneurship and Foreign Investments, brings together interdisciplinary groups of students, teachers and innovative companies to provide solutions to real business problems. As well as regular visits to the school by mentors from firms, students also visit participating companies, where they

¹⁸ <http://eduscol.education.fr/pid23542-cid45666/semaine-ecole-entreprise.html>

^(h) <http://www.dreamday.be/fr/index.html>

are given an introduction to the business and presentations of its products and technologies. The companies also offer their research infrastructure to the students, to help them to make prototypes.

A further example of this 'hands-on' approach comes from the Netherlands where, in 2004, Groningen University together with ID Media developed an educational internet game for students in preparatory intermediate and intermediate vocational schools. The goal of the "Starting Entrepreneur Game" (KvK Startersspel) is to inform students in a playful manner about the steps needed to start a business as well as to direct them to the proper organisations that have a role in business creation, such as the chamber of commerce. The game was first tested in 2005 by five schools and can now be used by all schools in the Netherlands; currently around 80 schools are registered. Last year 5,000 people visited the site¹⁹ where they can play the demo-version of the game.

Ensuring the Direct Involvement of Entrepreneurs in the Teaching of Entrepreneurship Education: the University of Valencia, Spain

At the University of Valencia in Spain business owners finance and manage a Chair on entrepreneurship education. Teachers/lecturers on the accompanying course are drawn exclusively from the local business community. This means they not only act as role models but are involved directly in the teaching of entrepreneurship education. Over the ten years that the programme has been running, 250 business projects have been developed. A key output of the venture has been the acquisition of entrepreneurial skills and attitudes amongst students.

Mini-Enterprises, Virtual Businesses

The most effective way to expose learners (and indeed teachers) to business methods

and challenges is through initiatives that use the technique of mini-companies to provide an environment for experimentation in business skills. These develop real business activity on a small scale and for a limited time, allowing learners to experience personally the challenges of entrepreneurship. The 2005 report from the European Commission on mini-companies shows that they allow students to acquire basic business skills, personal qualities and transversal skills and to display their creativity, develop enthusiasm and self-confidence, learn how to work in a team, become more willing to take responsibility and to use their initiative²⁰. The main factors (best practice) of effectiveness and success in implementing student company programmes include team working and the freedom of students to develop their own ideas, the development of links with the business world and the local community, and the availability of mentors and advisers from businesses.

Key Benefits of Mini-Companies

1. A strong connection with businesses and with the local community, and the involvement of the private sector;
2. Flexibility and adaptability of programmes to different types of education, and locally to different situations;
3. Enthusiasm and motivation generated in students (even those who lack motivation in more traditional subjects) and
4. The potential, in terms of creativity, initiative and innovation, that these activities are able to unlock in young people.

Source: DG Enterprise and Industry (2005) Best Procedure Project: Mini-Companies in Secondary Education

¹⁹ <http://www.kvkstartersspel.nl/demo/#>

²⁰ DG Enterprise and Industry (2005) Best Procedure Project: Mini-Companies in Secondary Education http://ec.europa.eu/enterprise/newsroom/cf/itemsshortdetail.cfm?item_id=3358

Evidence suggests that involvement in activities such as these can have a direct impact on the likelihood that students will go on to set up in business. Two national evaluations of youth enterprises in upper secondary education and training carried out in Norway in 2002 and 2005 show that people who participated in a youth enterprise are more likely to start up their own business: surveys in the over 29 age group show that the percentage who start their own enterprise is four times higher amongst those who have participated in youth enterprises than the average (16.6% compared to the population average of 7.5%)²¹.

Mini-Companies in Bulgaria

In Bulgaria, a Centre for Entrepreneurship has been established at Sophia High School (a vocational institution specialising in architecture, construction and surveying) and has fostered two student firms. The students learn the theory and practice of basic entrepreneurship by founding and running their own enterprises, which operate for a period of one school year and are guided by specially trained teacher-consultants. During their first steps in the field of entrepreneurship, the students are assisted by business volunteers drawn from the membership of the Business Club, which is also part of the Centre and which is designed to boost interaction between the school and local businesses. The business volunteers consult, coach and inspire the young people.

As a possible alternative to establishing real companies, virtual or “practice firms” are popular, which, as far as possible, mirror a “real” firm’s business procedures, products and services. Practice firms are especially used in secondary and vocational education. Students work on an enterprise project, getting an insight into business processes of real companies. Normally the practice firm is linked

to a real company. Practice firms are organised into various departments such as personnel, administration, marketing, accounting, logistics etc. Students work in different departments.

The training is practical, interdisciplinary and geared towards problem-solving. Thus students acquire the ability to work in teams and to take decisions, and develop responsibility for their work. In addition, they acquire other entrepreneurship-related skills such as the ability to negotiate, assess and take risks, and the ability to plan and organise their work. Practice firms are often part of wider networks in which they may trade with other practice firms. International partnerships with practice firms in other countries is also possible, for example, through the EUROPEN Worldwide Practice Firms Network which has more than 5,500 practice firms in 42 countries²².

Virtual Firms in the Czech Republic

The main goal of the «Virtual Firm» project in the Czech Republic is to show students how to set up and run a business. Students prepare a business plan around a theme that is relevant to the particular educational course they are following, or to their own interests or situation. As far as possible, the processes within the project mirror those encountered in real life. During such exercises the need to contact public administrative authorities arises (for licensing, company registration and taxation for example) and they do this by contacting virtual ones run by the National Centre for Practice Firms (CEFIF). In addition, 13 regional and one international fair are held during the year, organised by schools with the support of CEFIF. At the end of the school year students can wind-up their firms or pass them on to students from lower classes. International networking is achieved through the EUROPEN network.

²¹ The evaluations were carried out by the Nord-Trøndelags Research Institute, see Kovreid and Alsos, 2003.

²² <http://cms.europen.info/>

In Spain the “*Emprender en mi escuela*” (“Enterprising in my school”) and “*Empresa Joven Europea*” (“Young European Enterprise”) programmes launched by the Principality of Asturias provide resources to facilitate the adoption of entrepreneurial approaches in the education system. Both programmes allow students to start up and manage a mini-company, but the wider objective of the programme is to raise awareness of entrepreneurship among the educational community and other sectors of society and to provide schools and teachers with appropriate resources for the promotion of entrepreneurship in the education system. Participation figures have shown a steady increase in every education level, particularly in secondary education: 48,921 students and 1,250 teachers participated in the programme during its first phase, 2004-07

The Contribution of Private Associations and Organisations

As we have seen, **many organisations outside the mainstream public education sector have played a key role over the years in introducing and supporting entrepreneurship education.** Many of the notable examples are business and private organisations, which range in size from small, local providers to significant international players in the education field. Their hosts come from a broad variety of backgrounds, such as local chambers or sector organisations, university business centres, regional development agencies, consultancies, or corporate social responsibility initiatives/projects. Often they are financed through public subsidies or by private sponsors. Typically they do not require substantial budgets but provide very valuable content and logistical support to teachers and schools that do not have enough experience.

Junior Achievement – Young Enterprise

One of the largest and best known private organisations is the Junior Achievement Young Enterprise network (JA-YE Europe⁽ⁱ⁾). Funded by businesses, institutions, foundations and individuals, it operates in 41 countries. JA-YE supports a range of activities including a scheme that provides an opportunity for young people to run a company: the JA-YE Company Programme provides students between 15 and 21 years with in-depth experience of hosting a range of entrepreneurial functions from project conceptualisation through to design and production. Students are also given the opportunity to elect officers, negotiate wholesale and retail prices, calculate break-even points, prepare budgets, pay wages, conduct market research, create advertising and sell products. At the end of the programme, students liquidate their company, prepare a profit and loss statement and balance sheet and report on their key learning to a panel of their shareholders.

Another important international organisation is EUROOPEN, which promotes the idea of practice firms, facilitates an international network, develops methods, and represents its members to governments.

It has also developed a scheme to award EUROOPEN quality certificates to practice firms and practice-firm trainees, which was developed as part of a project funded under the EU’s Leonardo da Vinci programme²³.

External organisations devoted to promoting entrepreneurship education can be effectively associated with national strategies. In Norway, for example, JA-YE is an integral part of the national strategy and plays a key role in implementation. In Romania, the Junior Achievement Romania National Entrepreneurship Programme is integrated into

²³ <http://www.europen.info/Leonardo/index.html>

⁽ⁱ⁾ JA-YE Europe is the European arm of JA Worldwide, which serves 98 countries

the public school system and comprises 12 learning by doing components: Our Community, It's My Business, Global Marketplace, Company Program, Business in Tourism, Business in Technology, Enterprise without Borders, IT in Business, Maths for Business, Business Ethics, Innovate Program, Business Simulation Program (Titan).

The programme is run all over the country at all educational levels. Students receive free manuals and have access to online support.

Private associations and organisations within countries can also play a major role. For example in Asturias, Spain, an external organisation, Valnalón, has been invited to implement entrepreneurship education²⁴, which is now part of the regional curriculum, and the model is now being transferred to other Spanish regions. Specific initiatives driven forward under the Valnalón banner include “Empresa en Mi Escuela” (A Company in My School) and “Empresa Joven Europea” (European Youth Enterprise). In Luxembourg an ASBL²⁵ (asbl Jonk Entrepreneuren) has been given a public role by the government in promoting and delivering entrepreneurship education. Through its membership of the JA-YE network, and with support from the private sector, this newly created non-profit organization fosters student mini-companies in secondary schools.

Developing Structured Business Involvement in Entrepreneurship Education: the Italian Example

In Italy, the employers' association, Confindustria, has launched a project whereby entrepreneurs became part of school boards in 16 Italian provinces. Confindustria itself has developed a Young Entrepreneurs Division as a group of individuals whose aim is to strengthen awareness of the entrepreneur's role and

²⁴ www.valnaloneduca.com

²⁵ An Association Sans But Lucratif (ASBL) is a non-profit organisation which invests any surplus funds back into achieving its objectives. Membership is afforded to legal entities, companies as well as individuals.

to play the role of “critical conscience” within the Confindustria System, and as “innovation laboratories” with respect to civil society. The Division today counts 12,500 associations, organised across 105 Provinces and in 20 Regional Committees.

4.4.3 Developing an Active Role for Local and Regional Authorities

Local and regional authorities have an important role to play in the development of entrepreneurship education. As reflected in the progression model, to date they have had a varied role, with some being highly active, and others not playing a role at all. The progression model foresees local and regional authorities playing an increasingly significant role in contributing to the development of more systematic and structured approaches to entrepreneurship education, which will be necessary to deliver the wider goal of entrepreneurship education for all students. Ultimately, this may culminate in a statutory requirement for the establishment of partnerships based on local authority areas to ensure comprehensive coverage.

Regional and local authorities are *uniquely* positioned to take a lead role in the development of school clusters and education-business links. Where local and regional authorities have significant responsibilities for education (e.g. in Germany and Spain), it is vital that entrepreneurship education is fully reflected in local educational policy and practice.

Local and regional authorities can help to structure and broker relationships between schools and individual businesses, and also work with local business organisations to develop local strategies within national education frameworks, ensuring that business needs are appropriately reflected within local/regional curricula. They can also help to develop and provide access to banks of teaching materials and tools, and fund local/regional projects. Local and regional authorities can also ensure that entrepreneurship education is integrated into other local/regional strategies,

such as those related to social affairs (e.g. youth) and economic development.

Key Roles for Local and Regional Authorities

- Developing support networks
- Developing local and regional support centres
- Linking entrepreneurship education into wider local and regional strategies

Developing Support Networks and Centres

At a practical level, local and regional authorities can play an important role in the development of support networks and centres. They provide a natural forum for bringing schools together, and to facilitate dialogue and exchanges with businesses, to discuss entrepreneurship education and to share good practice. The UK provides an informative example of how a long period of local development of this type has been picked up by national government to ensure country-wide coverage, a step envisaged in the progression model.

Networking Entrepreneurship Education: the UK example

In the UK, the Enterprise Network has been established to provide support for enterprise education from 5-19. The vision for the network is to create a sustainable network of 50-60 Enterprise Learning Partnerships (ELPs) including all 155 Local Authority (LA) areas with some joining together to make an effective partnership. ELPs are a group of schools and organisations within a LA area who wish proactively to support entrepreneurship education. Each ELP will be given funding to support the enterprise journey 5-19 within their geographical sphere of influence. ELPs will work to support all schools in their area to improve the quality and quantity of entrepreneurship education. As well as the locally defined

activity undertaken by ELPs there will be a wide range centrally organised resources provided by the network for use by schools. The network will engage nationally recognised organisations working in entrepreneurship education to provide this such as Make your Mark and the Enterprise Education Trust. Enterprise Village⁹⁾ is the online component of Enterprise Network that provides a one-stop shop for all those with an interest in entrepreneurship education, primarily in England. Regional Enterprise Coordinators and ELPs will be able to develop local and regional pages to support greater community development and engagement.

In Wales, the Cyfenter Development Partnership provided the knowledge base for the Welsh Entrepreneurship Action Plan (WEAP) - a key strategic objective of which has been to embed entrepreneurship into the National Curriculum and to create an entrepreneurial culture among children and young people. Through its Dynamo project, the Welsh EAP sets out to change people's outlook and create a culture where enterprise is respected and valued. Dynamo organises teacher training events and produces a resource pack for schools including teacher notes and lesson plans, CD-ROM cards with information on the Welsh economy, and a CD ROM interactive game around entrepreneurship. All secondary schools in Wales are now able to access the Dynamo project and its materials.

Local and regional authorities can also provide support centres. These can provide general support to schools and teachers, and indeed to businesses, but more specific examples of interventions exist, a good example of which comes from Lithuania where pilot youth entrepreneurship centres are providing an institutional basis for youth entrepreneurship training in four municipalities. Four youth entrepreneurship centres have been established in Anyksciai, Mazeikiai, Taurage and Zarasai districts; a methodology for youth entrepreneurship training has been developed

⁹⁾ www.enterprisevillage.org.uk

drawing on the experience of partner organization „Communicare“ and training has been provided for sixteen consultant youth workers (four based in each municipality) to deliver a range of programmes (*“The first jump”, “Business start”* and *“Business development”*).

Linking Entrepreneurship Education into Wider Local and Regional Strategies

Localities and regions are often the geographical levels where other strategies are developed and implemented, e.g. in relation to youth and economic development. Entrepreneurship education can be strengthened by being integrated with these strategies, and can sometimes be linked to other funding streams, such as the European Social Fund and the European Regional Development Fund.

Making Entrepreneurship Education an Integral Part of Wider Socio-Economic Development: the Example of Asturias, Spain

In Asturias, the Agreement for Economic Development, Competitiveness and Employment (ADEC), which covered the 2004-7 period, was signed between the Government of the Principality of Asturias and social partners, and included a Programme for the Development of Entrepreneurial Culture. This has been renewed for 2008-2011, under the title of the Agreement for Competitiveness, Employment and Welfare of Asturias. This regional approach has also enabled linkages to be made with other funding streams. Thus in La Felguera, the body charged with implementing entrepreneurship education, Valnalón (see section 4.3.2), developed a project supported by the EU's EQUAL Community Initiative which developed a chain of educational activities to stimulate entrepreneurship, especially among women and young people, and which was included as 'Chain Entrepreneurial Training' in the 2004-7 ADEC.

4.4.4 Effective Entrepreneurship Education in Schools: Building the Local and Regional Entrepreneurship Education Ecosystem

Along with teachers, schools have a pivotal role to play in the development of effective entrepreneurship education: it is at school level that the different elements that make up entrepreneurship education need to be brought together to create the right teaching and learning environments within which entrepreneurial competences can be developed. Table 4.1 shows the key features of such an environment as highlighted in the Panel discussions.

Key features of an Effective Entrepreneurship Education Environment

- Quality exposure to enterprising individuals;
- An understanding amongst the students of the motivation and objectives behind the exercises that they are taking part in, e.g. to develop competences related to creativity and initiative, and the skills needed to take risks, as well as to run businesses effectively
- Experiential and hands-on learning to enable students to have fun, retain the outcomes of the learning experience and gain a sense of accomplishment that builds their self-confidence;
- Tasks which give learners responsibility and ownership of activities in order to promote the emergence and implementation of innovative approaches to problem solving and
- Teachers with 'know-how' of enterprise principles, of how to communicate and enthuse people about the central issues and of how to support students' self-directed learning.

As noted in the progression model, the typical starting position at the school level is characterised by great variation, from highly active schools to those where entrepreneurship education is not available, and also by ad hoc activities taking place alongside the main curriculum. Entrepreneurship education tends to be concentrated in secondary schools. **The ultimate goal of the progression model is for every school at every level to be involved in entrepreneurship education,** with clear linkages between levels/types of education and for wider linkages to be developed as part of the development of local entrepreneurship ecosystems. This will require a significant degree of development work in many places.

In terms of the players involved in creating the new environments needed by entrepreneurship education, it is at school level that teachers, students and entrepreneurs come together, and schools that build the potential to form clusters or partnerships which can span all levels of education and take in the full gamut of stakeholders at operational level, although his final step often needs the involvement of local or regional authorities as described in the previous section. Since schools are the locus for activity, they are also, of course, the place where real issues such as resourcing and timetabling have to be faced. But working together at local and regional levels within an overall strategy offers the opportunity to develop joint activities, to share resources locally, regionally and nationally, and to exchange experiences.

The process begins though with schools needing to develop their own coherent approaches to entrepreneurship education, perhaps building on teaching and learning that already have been developed by individual teachers. Various actors need to work together to achieve this. The importance of this process has been highlighted by the Finnish experience, where teachers, students and school boards have worked together to agree about common goals and create a conducive environment within

which to promote entrepreneurship education. Such aspirations must also be accompanied by a concrete plan and guidance in order to build a holistic approach. Importantly, the Finnish experience also highlights that effective entrepreneurship education is about process and participation, together with a strong cross-disciplinary approach; rather than an adherence to traditional boundaries.

The development of a more integrated system brings a range of benefits: access to higher quality resources, economies of scale, peer-learning and sustainability. At the same time it is important that frameworks allow sufficient flexibility for individual teachers and schools to develop approaches and materials that match their own specific needs and abilities, whether these are contextual (e.g. the backgrounds of the students, or the challenges faced by local industry) or institutional (e.g. depending on the scope of entrepreneurship education and its relationship with the curriculum). Integration also implies strongly that common interests and potential synergies between institutions and levels should be exploited (between schools and universities for example). This will result in an increasing degree of cooperation and clustering of several individual schools and groupings of the individual businesses they work with. Such arrangements may then become more systematic through the development of more formal arrangements between municipalities and business organisations (e.g. chambers of commerce).

In considering ways in which an increasingly holistic approach to entrepreneurship education can be built effectively, many of the activities discussed in the preceding parts of this chapter are applicable in this context. However, there are also a number of important elements that can be identified at this point and these are shown in the box below.

Key Elements in Developing a Local Entrepreneurship Education Ecosystem

- Creating experiential learning environments (often additional to and/or complementary with 'traditional' classroom-based educational settings)
- Developing clusters, partnerships and wider relationships to embrace all levels of education and a wide range of stakeholders
- Developing local and regional support centres

Illustrating these elements through good practice is inherently challenging at this level, since by definition it is individual schools and localities that have to take the initiative in this respect. However, there are a number of examples of interventions that have been sponsored by national and/or regional/local authorities which demonstrate how action can be stimulated.

Creating Experiential Learning Environments

An informative example of how experiential learning environments can be created is provided by the Italian "*Impresa Formativa Simulata*" (IFS) ("Educational simulated firm") system. The IFS is being used to introduce a new type of entrepreneurship education, based around purpose-built software that facilitates virtual simulation of the business environment, including government agencies, banks and chambers of commerce. Some 731 schools and 370 firms have participated so far in this initiative. Fifteen regional centres have been established in cooperation with a number of Italian regions in order to support the implementation of the system at the local level. The new training model emerging from this teaching method focuses on the development of entrepreneurial and innovation skills and capacity within and among schools. It

also demonstrates the benefits of establishing alternatives to the traditional classroom model. The IFS key features are that it promotes a learning strategy based on 'learning by doing'; it uses a simulation laboratory to bridge the gap between the classroom and enterprises, and requires co-operation between schools and businesses, establishing educational paths that focus on clearly identified learning objectives.

Clusters, Partnerships and Wider Linkages

In countries which have a comparatively long tradition of entrepreneurship education, the development path in some localities has led schools to develop their own clusters, perhaps leading later on to the development of education-business partnerships under the auspices of local authorities and business organisations. In some parts of Europe, regional action has been significant. At this scale a wider range of players can potentially be brought into the equation, including higher education and regional sector bodies, as shown below.

In Spain, for example, the Institute for Small and Medium-sized Enterprise of Valencia (IMPIVA) and the Valencia Foundation for University and Enterprise (ADEIT) have joined forces to offer Technical and Educational Institutes in the area improved access to the business community. The scheme involves a consortium of business people from the city which aims to promote entrepreneurship in schools and universities. This is primarily achieved through the delivery of training and targeted activities financed by the consortium of companies. An example is a summer school which aims to train university teachers to motivate students in entrepreneurship. This programme features a classroom 'workshop' as well as online training.

The programme was devised to specifically address/exploit the following key challenges/features of the Valencia region and economy, to address a range of specific issues via an

integrated approach: the falling numbers of graduates entering the teaching profession; the need to maximise opportunities already offered by the ERASMUS scheme which Valencia University already participates in and the need to focus on the key employment sectors within the city and wider region (metals, mechanics, food and drink).

Where regional administrations have significant responsibilities in the fields of education and enterprise, it becomes possible to develop even wider and more structured interventions, such as those in Baden-Württemberg in Germany. As the box below shows, interventions here have sought to develop a more integrated approach to the support provided for entrepreneurship education, and have spanned the levels between the region and the country as a whole.

Towards an Integrated Approach Across National and Regional Levels: Baden- Württemberg, Germany

In Germany the Baden-Württemberg Schools Entrepreneurship Programme aims to foster an entrepreneurial spirit through a varied package of measures, including school-firms and mini-enterprises, and spanning both national and regional levels. A business start-up competition for students at national, regional and local level (e.g. the 'Nordschwarzwald-cup') is an important component of the programme and is based on a computer-based start-up game. During the competition a virtual firm is run over a simulated period of 16 years, from start-up until it is listed on the stock exchange. Teams are composed of players from different types of schools. In addition, a range of support is provided to help schools take advantage of the benefits of using the mini-enterprise approach, including: a conference "Schule und Selbständigkeit" ("School and Self-Employment") held in November 2009; fairs for school firms and mini-enterprises; a database of mini-companies on the Web (www.schulen.newcome.de); materials and literature on starting a mini-enterprise; a network of contact points (which run seminars and workshops for teachers and can also arrange interactions with real businesses), and a national hotline for legal advice.

5

Taking Forward the Agenda

Key Points from Chapter 5.

There is consensus amongst Member States that entrepreneurship should be embedded in every national/regional education and/or lifelong learning strategy and provide comprehensive coverage of levels/types of education and that there is a key role to be played by the EU in supporting developments.

Actions that can be usefully performed at EU level include, among others:

Funding the establishment of national and regional Centres for Entrepreneurship Education to act as an observatory of good policy and practice, a research and development hub, and a platform for stakeholder engagement.

- Funding new research and development and the collection and dissemination of good practice.

- Support the development and dissemination of teaching materials and methodologies, and teacher training, e.g. through seminars and workshops.
- Funding awareness-raising initiatives to spark new activities.
- Incorporating entrepreneurship education fully into forthcoming programmes (post-2013) through the impact assessment/ex-ante evaluation procedures and then in the design of the programmes themselves (not as a later addition).
- Funding interventions in MS/regions to encourage cohesion and new economic growth and prosperity through National Reform Programmes (NRPs) and Operational Programmes (OPs) by promoting and developing opportunities through ESF/ERDF to ministries/programme monitoring committees and regional authorities. Entrepreneurship education activities

can be supported through these funds. Business-development measures are commonplace within NRPs and OPs and can be supported and enhanced through the development of coherent packages of support for entrepreneurship education.

5.1 Introduction

Overall, it is clear from the picture of the current state of play which has been documented in chapter 2 that there is considerable scope for action to assist countries to move forwards along the progression model presented. At the same time, the analysis in chapter 2 has also revealed the full scale of the agenda that needs to be carried forwards: entrepreneurship education has the potential to make a contribution across a wide array of social and economic areas, and its broad conception points towards the need for nothing less than a paradigm shift in educational practice.

It is important to understand the scale of the tasks facing actors within Member States as this provides the context for determining the best ways in which the EU can lend support to Member State governments and other stakeholders.

In general a number of points are salient. Firstly, it will be important for Member States to divide the task into achievable segments, to set priorities and define a sensible sequence of tasks where later actions build upon preceding ones. Secondly, as we have already emphasised, it is important that national/regional governments set broad frameworks within which an intensive development of entrepreneurship education at every level can be encouraged, rather than adopting a more top-down approach.

5.2 Policy Implications

There is a consensus with regard to the goals of entrepreneurship education, and these might be articulated as follows:

- Entrepreneurship should be embedded in every national or, where appropriate, regional education strategy and lifelong learning strategy to enable core entrepreneurial competences to be developed from primary and secondary level education as a mainstreamed part of the curriculum through to tertiary levels of formal education with a range of elective subjects for students to specialise in.
- To encourage the development of entrepreneurial European citizens able to create and exploit opportunities for new business formation and improved business survival, developing new employment, wealth and economic stability.
- To create a more entrepreneurial European Union, populated with citizens for whom entrepreneurship is strongly embedded in their cultural identity and regarded as a fundamental means of creating and realising opportunity in all aspects of their lives.

Flowing from this, there are naturally implications across a broad range of policy fields which now need to be considered. Of particular note are:

- the impact of entrepreneurship education upon **convergence policy**, relative to both to regional disparities within MS and disparities across the EU27;
- the impact upon **competitiveness** policy, particularly in light of the current economic downturn and ageing populations - promoting innovation, diversification and business transfer and succession (a point particularly emphasised at the Rome Panel).
- the impact upon **youth policy**, in relation to engaging with young people, enhancing their life skills and life choices;
- the impact upon the **cohesion** agenda, for example in respect of driving forward

agendas for active citizenship, Corporate Social Responsibility, developing more resilient communities and developing capacity and social capital.

5.2.1 The EU as Enabler: Supporting New Developments and Strengthening Programmes

It is generally recognised that funding for entrepreneurship education continues to be a neglected priority for national governments and one where budgets were threatened by the current recessionary situation. However, it is possible to identify a significant number of EU level funding sources that could be used to support Member States and regions to develop initiatives, most notably the European Social Fund which is widely utilised. For example, In Baden-Württemberg, Germany, sector specific measures and networks to support entrepreneurial thinking and acting at schools in extracurricular youth work have been supported by ESF, with eight approved projects to date at a value of €1.2 million. In Romania, the national strategy to develop human resources which includes entrepreneurship education is supported by the European Social Fund (ESF) – €201.127.040 has been allocated for the 2007-2013 SOPHRD programme. At the same time, it is important to note that knowledge of the potential of these sources to support entrepreneurship education was variable amongst the participants, which was to be expected given the significant differences in their backgrounds.

Overall, there is then a role for the EU to mobilise resources at its disposal and to fulfil to a certain degree and in key areas of intervention a catalyst function itself through European projects and institutions. Some of this activity may be about awareness-raising of the potential for structural funds or other EU resources to be used to support action, but more is possible, including ensuring that entrepreneurship education is given proper consideration in annual calls for proposals/tenders and in the design of new programmes post-2013.

The following table sets out the key activities to be undertaken.

The EU as Enabler: Key Activities

- Funding the establishment of national and regional Centres for Entrepreneurship Education to act as an observatory of good policy and practice, a research and development hub, and a platform for stakeholder engagement.
- Funding new research and development and the collection and dissemination of good practice.
- Support the development and dissemination of teaching materials and methodologies, and teacher training, e.g. through seminars and workshops.
- Funding awareness-raising initiatives to spark new activities.
- Incorporating entrepreneurship education fully into forthcoming programmes (post-2013) through the impact assessment/ex-ante evaluation procedures and then in the design of the programmes themselves (not as a later addition).
- Funding interventions in MS/regions to encourage cohesion and new economic growth and prosperity through National Reform Programmes (NRPs) and Operational Programmes (OPs) by promoting and developing opportunities through ESF/ERDF to ministries/programme monitoring committees and regional authorities. Entrepreneurship education activities can be supported through these funds. Business-development measures are commonplace within NRPs and OPs and can be supported and enhanced through the development of coherent packages of support for entrepreneurship education.

5.2.2 Roles and Responsibilities at EU Level

In the arrangements recommended above, there are considerable synergies to be realised between the different functions. It can also be seen that there is potentially a number of stakeholders who could play a role in their realisation, i.e.:

- DG Education and Culture (EAC);
- DG Enterprise and Industry (ENTR);
- DG Regional Policy (in relation to ERDF);
- DG Employment, Social Affairs and Equal Opportunities (in relation to ESF);
- EUROSTAT (in relation to the development of indicators and evidence base monitoring);
- the Education, Audiovisual and Culture Executive Agency (in relation to the Lifelong Learning Programme) and
- the Executive Agency for Competitiveness & Innovation (in relation to pilot projects in entrepreneurship education).

Trans-national laboratory on teacher developments in entrepreneurial learning: South East European Centre for Entrepreneurial Learning

The South East European Centre for Entrepreneurial Learning (SEECEL) is an institution which evolved out of the EU's enterprise policy monitoring framework in the EU's pre-accession region. On the basis on a multi-country interest in cooperation on entrepreneurship education, the Centre receives support from the European Commission and the Croatian Government. Eight countries are supported by the Centre where both education and economy ministries make up the Governing Board.

The Centre's activities are built around multi-country experts teams working on entrepreneurial learning curriculum and outcomes, pre-service and in-service teacher training and innovative approaches to promoting the entrepreneurial school. Within the pre-service strand, SEECEL is working with one university (education and other faculties which prepare teachers for subject-oriented teaching) from each of the 8 participant countries to develop pre-service entrepreneurship teacher training with particular reference to the entrepreneurship key competence. An optional course at the universities focuses on the role of the entrepreneurial school and the development of entrepreneurial characteristics in students.

SEECEL's in-service training support is offered at two levels. Firstly, at national level (education agencies) with a view to policy enhancement and monitoring arrangements. Secondly at school level, where teachers trained road-test the teaching principles and methods in 32 schools across the 8 participant countries (2011-2012). Given interest in sustainability of developments in the school environment, training of school directors is a core area of SEECEL's work.

A menu of Actions

– the Oslo Agenda for Entrepreneurship Education in Europe

The aim of this document is to step up progress in promoting entrepreneurial mindsets in society, systematically and with effective actions.

The Agenda is a rich menu of proposals, from which stakeholders can pick actions at the appropriate level, and adapt them to the local situation.

Relevant actors are indicated for each one of the proposed actions.

	EU	Member States	Educational authorities	Regional / Local authorities	Schools/Universities	Intermediary organisations	Businesses/entrepreneurs
A - Framework for policy development							
A1 Ensure political support for entrepreneurship education at the highest level. Real progress will be possible only with a strong commitment from national and regional governments and from the relevant Ministers, in the context of the implementation of the Lisbon strategy.							
A2 Better integrate Entrepreneurship Education into the Lisbon monitoring process (Integrated Guidelines for Growth and Jobs), and make the assessment of Member States' progress in this field more effective by means of applying specific indicators.							
A3 Set up a European-wide framework of what is to be achieved, followed by proper evaluation of the impact of measures taken. Coordination needs to be ensured at the EU level, with the definition of broad objectives and of desired outcomes for entrepreneurship education. The above framework could be supported by the establishment of a European Observatory for Entrepreneurship Education, with national antennae.							

	EU	Member States	Educational authorities Regional /Local authorities	Schools/Universities	Intermediary organisations	Businesses/entrepreneurs
A4 Launch national strategies for entrepreneurship education, with clear objectives covering all stages of education. Such strategies should call for the active involvement of all relevant actors (public and private), and establish a general framework while defining concrete actions. These will range from the inclusion of entrepreneurship into the national curricula to providing support to schools and teachers. The overall goal will be to ensure that young people can progress coherently in acquiring entrepreneurial competences across all stages of the education system.						
A5 Create Steering Groups, both at European and at national level, where all the different stakeholders involved in entrepreneurship education can be represented (public administrations, businesses, educational establishments, students, etc.). These Groups would have among their objectives that of setting targets for entrepreneurship education, taking into account its various elements, and that of reporting on progress achieved.						
A6 Promote entrepreneurship education at regional level, with a coherent programme bringing together local stakeholders and addressing the various levels of education through a range of different instruments.						
A7 Facilitate the development of entrepreneurship education within the Bologna process by: encouraging the mobility of teachers (across countries and across different institutions, including in the private sector); recognising the role of educators other than teachers (practitioners, entrepreneurs, students themselves); recognising entrepreneurial career paths in undergraduate education at university.						
A8 Increase coherency between European funding programmes that can be used to support entrepreneurship education projects and activities (in particular the Lifelong Learning Programme, the ESF, the ERDF). These programmes can be valuable in supporting actions taken at national and local level.						
A9 Ensure coordination at European level in the evaluation of programmes and activities, in order to allow the comparability of results. The EU could bring together a group of researchers in entrepreneurship education, to help define indicators and specify typical educational processes.						
B - Support to Educational Establishments						
B1 Better integrate entrepreneurship programmes and activities in the established curriculum for schools at all levels (primary, secondary, vocational), as a horizontal element in all fields of study (entrepreneurial mindset) and as a subject in its own right (entrepreneurial skills).						
B2 In its broader definition (fostering attributes like creativity, autonomy, initiative, team spirit, etc.) entrepreneurship should be also included in the curriculum for primary schools. Especially at this level of education it is important to convince schools, teachers and parents that entrepreneurship is a key competence for all, and it does not aim to turn all pupils into businessmen.						
B3 The European Commission should support curricular reforms to be undertaken at national level and facilitate comparative analysis, through a range of instruments going from the coordination of the implementation of the Lisbon strategy to facilitating the exchange of good practice.						

	EU	Member States	Educational authorities	Regional /Local authorities	Schools/Universities	Intermediary organisations	Businesses/entrepreneurs
B4 Support the use of practice-based pedagogical tools whereby students are involved in a concrete enterprise project (for instance in running a mini-company). Embed these activities as a recognised option in official school programmes, particularly at secondary level.							
B5 Stimulate - through targeted public funding - the implementation of pilot projects in schools, in order to test different ways of delivering entrepreneurship education. The final goal will be to disseminate resulting good practices widely, and to encourage take up of tested methods by the largest number of schools.							
B6 Ensure sustained funding/support for entrepreneurship education activities, and for the implementation of concrete enterprise projects in school. The termination of short-term project funding or the changing of funding mechanisms creates fragility to sustainable provision, unless this can become embedded within a coherent strategy.							
B7 Grant public funding for the establishment of Entrepreneurship Centres at universities and the creation of a network between them. These Centres would have the missions - among others - of: spreading entrepreneurship across different fields of studies within the institution; fostering the commercialisation of research and the exploitation of new business ideas; building links with businesses; etc.							
B8 Build common European and national platforms of existing programmes, projects and teaching material, in order to help sharing and dissemination. Such platforms will greatly support practitioners in improving the offer of entrepreneurship education.							
B9 Develop research to assess the impact of entrepreneurship education on individuals, communities, society and the economy. The possibility of tracking alumni will be an essential success factor							
C - Support to Teachers and Educators							
C1 Providing specific training to teachers in entrepreneurship is a policy issue, and should be attached to the national curriculum reforms. The educational authorities should talk to teachers in their own language, explaining why entrepreneurship is a key competence for all and how related methods and activities can bring more dynamism and innovation into different courses.							
C2 Adopt innovative methods to train teachers in entrepreneurship. These would include case studies and other inter-active methods, such as involving teachers in real work on enterprise projects or even in running themselves a mini-company. By acquiring direct experience, teachers will be more effective when using these methods with the students.							
C3 Set-up incentives at school level to enable teachers to teach entrepreneurship, for instance by means of setting up staff development funds, and by recognising and rewarding the involvement of teachers in activities that require an innovative pedagogy and very often also an extraordinary effort from them.							
C4 Launch innovative actions for training teachers on entrepreneurship, with a European dimension, to be supported under the Community Lifelong Learning Programme.							

	EU	Member States	Educational authorities Regional /Local authorities	Schools/Universities	Intermediary organisations	Businesses/entrepreneurs
C5 Support the mobility of educators across Europe, particularly in higher education, through the Community Lifelong Learning Programme and/or other instruments specifically designed for that purpose. Greater mobility and exchange of experience is needed in Europe, not only between universities but also between academia and the business world. Programmes need to be developed that allow educators to spend time at other institutions and/or in the private sector to truly engage, learn and develop. Europe needs greater sharing of knowledge and good practice across sectors and national borders.						
D - Entrepreneurship activities in Schools and in Higher Education						
D1 Embed elements of entrepreneurial behaviour (curiosity, creativity, autonomy, initiative, team spirit) already in primary school education. To this end, use games, cartoons and other tools appropriate to the age of pupils.						
D2 Starting from primary school, raise awareness in young children of the role of enterprises and entrepreneurs in society. Emphasising the notion of “responsible entrepreneurship” will help to make an entrepreneurial career a more attractive proposition.						
D3 Disseminate within schools a book with success stories of young entrepreneurs, in order to improve the image of entrepreneurs as role models for young people.						
D4 Introduce innovative pedagogies into all courses, as a necessary basis for building an entrepreneurial spirit. Extend the range of pedagogies in use through innovative curricula development. School education should build upon the curiosity and the natural entrepreneurial ability of children.						
D5 As part of the final evaluation of a programme or course in entrepreneurship, test the entrepreneurial competences of students and offer them a certificate (“entrepreneurial driving licence”) acknowledging the acquisition of those skills.						
D6 Associate students to real companies and to business people, in order to ensure a close relation with real business experience. Students should not be kept in isolation and far from the world outside the school, for instance when running a virtual firm or simulating a business plan.						
D7 Allow and support the spontaneous initiative of student associations pursuing objectives such as creating links with businesses, and involving students in work on enterprise projects. Recognise and reward the time that students dedicate to these activities by means of educational credits.						
D8 Engage alumni in the activities of the school/university and in the classroom (for instance, alumni who started a company).						
D9 Offer entrepreneurship education to disadvantaged groups. In particular, young people at risk of social exclusion (low-income youth, school dropouts, adolescents in danger of long-term unemployment, refugees, etc.) may greatly benefit from this type of training. It can raise the motivation of those who learn best by doing, and who have difficulties in more traditional subjects. Some programmes addressing these target groups proved very successful both in terms of start-ups and of social integration.						

	EU	Member States	Educational authorities Regional /Local authorities	Schools/Universities	Intermediary organisations	Businesses/entrepreneurs
D10 Higher education establishments should integrate entrepreneurship across different subjects of their study programmes, as it may add value to all degree courses (e.g. technical and scientific studies, but also humanities and creative studies). All faculties/disciplines should develop opportunities for students at every level to experience entrepreneurship						
D11 In higher education, bring entrepreneurs into the classroom and involve students directly in enterprise projects. Using active learning methods is more complex than traditional teaching methods. It requires engaging students' feelings and emotions in the learning process. Educators/facilitators therefore must be able to create an open environment in which students develop the necessary confidence to take risks.						
D12 Increase the production of European case studies to be used in the classroom in higher education. Group work on concrete cases is an effective method, as it improves the understanding of real issues related to entrepreneurship and engages students in finding solutions to real problems. To be most effective, case studies used should have a European and local dimension, rather than being imported from the US.						
D13 Give entrepreneurship more academic esteem: establish good research programmes and PhD programmes on entrepreneurship, in order to create a "critical mass" of future teachers with this specific competence;						
D14 Encourage students, graduates and researchers with commercially viable business ideas to develop them into companies, by providing a range of support services within the institution (incubators, financing, mentorship, etc.).						
D15 Embed evaluation systematically into all programmes. The most effective evaluation is independent and comparative (i.e. it should be run before the beginning of the programme and after its conclusion).						
E - Building links and opening education to the outside world						
E1 Encourage the creation of learning communities with the mission of fostering entrepreneurial mindsets, by building links between the public and the private sector, involving schools, academia and businesses, as well as relevant intermediary organisations. In particular, the role of those intermediary organisations dedicated to the dissemination of entrepreneurship activities within schools and universities, and to building links between education and the business world, should be better recognised.						
E2 Encourage the involvement of private partners in education for entrepreneurship, through funding or contributions in kind. This involvement should be seen by firms as a long-term investment, and as an aspect of their corporate social responsibility.						
E3 Businesses should consider donating at least a tiny part of the working time of staff to participation in activities within schools and universities. In fact, mentoring and coaching from people with business experience are a basic element in all entrepreneurship training.						

	EU	Member States	Educational authorities	Regional /Local authorities	Schools/Universities	Intermediary organisations	Businesses/entrepreneurs
E4 Develop or support research on how employers can be better engaged in school/university education. The business community needs incentives to more fully engage with educational institutions. Opportunities for mutual benefit can work, but are often not recognised as verifiable and appropriate staff activities.							
E5 Help develop the pedagogical abilities of entrepreneurs and business people, in order to make their participation to activities in the classroom more effective. This task could be usefully performed by those non-profit organisations dedicated to linking schools and businesses, and by business organisations.							
E6 Conceive, develop and promote a label for “entrepreneurial schools” and “entrepreneurial universities”, to be used by educational institutions on a voluntary basis. Broad criteria could be defined at European and/or national level, which should be in any case adapted to the local environments and education systems. This initiative could be implemented at national level by intermediary organisations with in-depth experience in entrepreneurship education, through cooperation with educational authorities and with schools/universities.							
E7 Give young people the opportunity to develop their enterprising skills by helping them to create their own “summer job”, and earn money by using their own ideas and initiatives. These activities can be promoted through cooperation between schools, non-profit organisations, businesses, local authorities.							
E8 Build Entrepreneurship Centres at a local level, with the missions of assisting schools and teachers, developing links between educational establishments and enterprises, facilitating the participation of entrepreneurs and business people in programmes at school and university, promoting raising awareness initiatives in the local community.							
F - Communication activities							
F1 Launch awareness campaigns at European and national level, ensuring that entrepreneurship is understood in its broader sense (not just about running a business). Broad initiatives could bring together and coordinate different actions to take place at national and local level (e.g., entrepreneurship days, or a European Year of Entrepreneurship).							
F2 Celebrate entrepreneurship education activities and programmes that work well, by organising awards and competitions.							
F3 Establish awards, at European and/or at national level, to acknowledge enterprises that distinguish themselves more in dedicating funds and working time of their staff to teaching, mentoring and more generally to participation in activities within schools and higher education.							

7

Good Practice Examples

7.1 The Danish Foundation for Entrepreneurship

Country : Denmark

Contact details:

Responsible organisation :

Danish Enterprise and Construction Authority

Name and Surname of contact person: Bent Lindhardt Andersen

Street and number: Langelinie Allé 17

Postal code: 2100

City: Copenhagen Ø

E-mail of contact person: bla@ebst.dk

Website of organisation: www.ebst.dk

Description of the measure

The Foundation was established in January 2010 by the Ministry of Education, Ministry of Science, Ministry of Economics and Business Affairs and Ministry of Culture. The four ministries launched in 2009 a national strategy for entrepreneurship education, in which the Foundation was one of the new initiatives. The Kauffman Foundation in USA has, among other things, been the inspiration for the creation of this new organisation. The Foundation is intended to create a coherent national commitment to education and training in entrepreneurship and become a national knowledge centre for education and training in entrepreneurship. The foundation will receive a government grant of DKK 25 million per annum in the period 2010-2012. An estimated amount of around DKK 40 million in private sponsorship will be donated to the Foundation in 2010 (both financial and in-kind contributions). The progress of the Foundation is monitored through a 3-year contract with the

Danish government (updated each year). The Foundation is responsible for the following 10 tasks: 1. Development of entrepreneurship teaching 2. Development of study programmes, courses and teaching methods for students 3. Development of tests and examinations 4. Talent development 5. Collecting and disseminating knowledge 6. International and cross-national initiatives 7. Developing and co-financing entrepreneurship strategies in the education system 8. Dialogue with educational institutions 9. Implementing activities to foster a culture of entrepreneurship 10. Operator of future national and regional initiatives

Objectives:

To promote young people's competencies within the fields of independence, innovation and entrepreneurship - operates as a knowledge centre for all educational institutions, which assist young people in education to establish a career as self-employed or implement other skill imparting activities.

Start Date: 01/01/2010

Target group: Students from elementary to ph.d.

Why is this measure a success?

22% of all students in high school or vocational school are undergoing entrepreneurship education. In higher education this number is 11 %. During 2010 the Danish government and the foundation have contracted for the various extra projects, such as: - Entrepreneurship centres on universities with a total budget of DKK 80 mil. in 2011-2012 - Effect measurement project on entrepreneurship education from elementary school to ph.d - Scholarships to entrepreneurship talents in higher education

7.2 Action Programme Education Entrepreneurship

Country: The Netherlands

Contact details:

Responsible organisation:

Ministry of Economic Affairs, Agriculture and Innovation

Name and Surname of contact person: Mr. Jurgen Geelhoed

Street and number: P.O. Box 20101

Postal code: 2500 EC

City: Den Haag

E-mail of contact person: jj.geelhoed@minez.nl

Website of organisation: www.rijksoverheid.nl/ez & www.onderwijsonderneemt.nl

Description of the measure:

It is primarily the educational system that allows us to open up people's minds to the opportunities offered by entrepreneurship and to teach them the know-how, the mindset and the skills needed. It is for this reason that the Dutch government encourages via an integral approach for entrepreneurship in education; from primary school up to and including university. The ministers of Economic Affairs and of Education, Culture and Science have been promoting entrepreneurship in education since the year 2000. This was done together with (umbrella) organisations in the field of education and the business community. The general line taken since 2008 is to invest more in networks in order to promote the transfer of knowledge between educational institutions (and

thus teachers) and entrepreneurs. The idea is to realise a more structural transfer of knowledge rather than transfer on a one-off project basis. Since 2008 the action programme Education and Enterprise focuses on several action lines: 1. Educational Entrepreneurship Networks. Schools set up a network joining forces with businesses to stimulate students, teachers and school managers to show more entrepreneurial behaviour. 2. Developing a national entrepreneurship certificate in middle vocational education and higher education. 3. More entrepreneurship in higher education by means of more Centres of Entrepreneurship. 4. Entrepreneurship Training Programmes. In collaboration with the Netherlands Institute for Curriculum Development (SLO), a train-the-trainer programme is developed for a more enterprising teaching staff. 5. Setting up an exchange programme focused on (potential) student entrepreneurs in association with the Kauffman Foundation and their Global Fellowship Programme. 6. Measuring Effects. The action programme initiates research on the development of entrepreneurship education in the Netherlands. Outcomes of the action program are monitored.

Objectives:

To increase the amount of educational institutions which integrated entrepreneurship in their policy, their organisation and their curriculum. -More pupils and students to show entrepreneurial behaviour and start up their own business five years after completing their education.

Start Date: 01/01/2008

Target group:

Educational institutions, from primary education up to and including university, their pupils, students and teachers and companies and entrepreneurs.

Why is this measure a success?

The action programme initiates research on the development of entrepreneurship education in the Netherlands and evaluates the effects of implemented policy. Interim evaluation subsidy scheme

- The E&E subsidy scheme works effectively for all forms of education, from primary schools up to universities.
- Pupils at primary level rate the projects as fun, and consider themselves as enterprising.
- The E&E - project has been or will be sustainable at most schools.
- Entrepreneurship education is given a boost at all higher educational institutions and more students follow entrepreneurship education on balance than before. The scheme succeeds in provoking more enterprising behaviour and a more enterprising attitude amongst students, and eventually more business activity.

In 2010 62% of students feel that entrepreneurship forms a “reasonably” to “very important” part of their career wish. -In 2010 23% of students say they are certain they want to become an entrepreneur, in 2007 this was 13%. -In the period from 2007 until early 2010, in education has occurred a shift towards a higher level of encouragement for entrepreneurship or enterprising behaviour.

7.3 TF-Fest

Country: Bulgaria

Contact details:

Responsible organisation: Център на учебно-тренировъчните фирми

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Website of organisation www.buct.org

Description of the measure:

To maximise the benefit to pupils participating in enterprise education projects (“training firms”), it is crucial to organise events replicating real-life trade fairs as closely as possible. Such events teach pupils how to plan participation in a trade fair, set up a stand, occupy it, engage in networking and conduct negotiations. The first fair for enterprise education projects took place in 1997, but after a thorough analysis it was decided to move up from an annual domestic event to an international forum on enterprise education where pupils can compete with each other to measure their performance. Participation was sought from representatives of the business community, public administration, local government, NGOs, secondary schools and institutions of higher learning. Thanks to the Plovdiv International Fair this event can be held on real-life fair premises. In the run-up to the event the pupils are prepared using a specially developed methodology. At the event itself they participate in a series of competitions: best advertising strategy and positioning of their trade mark, best stand, best company clothing, etc. TF Fest has been attracting participants from Romania, Slovakia, Austria, Croatia, Ukraine, Macedonia and Montenegro for many years. It is organised by the Centre for Enterprise Education (TsUTF), a public organisation that is part of the Ministry of Education, Youth and Science. It is responsible for over 300 enterprise education projects in secondary schools throughout the country.

Objectives:

Bring future entrepreneurs and labour market participants into contact with actual entrepreneurs and have the entrepreneurs rate the performance of pupils and their mentors - compare the performance of Bulgarian and foreign projects - achieve training conditions that replicate real-life business as realistically as possible

Start Date: 22/04/2005

Target group:

Per year about 4000 pupils from Bulgarian secondary schools taking part in over 300 enterprise education projects from 55 schools in 39 cities

Why is this measure a success?

TF Fest is already a well-established and important forum and has been very popular, not only in Plovdiv and Bulgaria, but in the whole of the Balkan region. It plays a very significant role in creating, developing and fostering an entrepreneurial spirit in young people, as it lets them put their skills to the test in a real business environment and gain experience that will stand them in good stead in the future development. I have always been impressed with how seriously and thoroughly both the organisers and the participants approach the event and how eager they all are to make a good impression. This is a good way to prepare the entrepreneurs of tomorrow.

They impress not only by their business skills, but also by their observance of business etiquette and fair competition practices. Valentina Petrova, manager, Fortis Bel

During the 2010 edition a record number of 97 projects took part representing 673 pupils, 43 schools, 95 teachers and 5 countries. TF Fest was sponsored by 12 companies and institutions, 14 competitions were held, and 2 socially responsible projects were presented: Going to school on foot and Academy for Socially Responsible Business. A number of pupils have been offered traineeships by some of the sponsoring companies.

7.4 Student company program

Country: Estonia

Contact details:

Responsible organisation: Junior Achievement Arengufond (JAA)

Name and Surname of contact person: Epp Vodja

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City: Tallinn

E-mail of contact person: epp@ja.ee

Website of organisation: <http://www.ja.ee/>

Description of the measure:

Throughout the school year different courses, fairs and competitions are organised for the registered student companies. The companies must register themselves at JAA and they have to have an accredited adviser/teacher. The student company acts as a small firm. It puts together its business plan and acts according to this. Student company produces and sells its products or services. At the end of the year the company submits its financial report. The students are not paying any taxes. They have to declare their individual income in case its exceeding tax free minimum.

Objectives:

The student company is created as a part of the economic course program so that the students could better and more easily learn the principles of running a company; to make them more initiative and towards problem solving attitude.

Start Date: 15/09/1992

Target group:

The target group is pupils. The main program is for high-school pupils but there is also so called mini-firm program for the younger ones.

Why is this measure a success?

This program is being so successful as it combines to important parts of the development of a young entrepreneur. Besides getting valuable knowledge about entrepreneurship it develops young person's mindset to be initiative, more confident and open-minded.

7.5 Entrepreneur 's Skills Certificate

Country: Austria

Contact details:

Responsible organisation: Austrian Federal Economic Chamber Department Education Policy
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Description of the measure:

The Unternehmerführerschein (Entrepreneur's Skills Certificate/ESC) consists of 3 basic modules (A, B and C) and an advanced module (UP - Unternehmerprüfung). The 4 modules equip participants to acquire the skills needed to understand fundamental problems and relationships in a business and to become business owners. ESC training also promotes social skills. After completing each module, participants can opt to sit a paper, and, if successful, obtain a certificate. The UP module, at the level of master craftsman (Meisterprüfung), completes the ESC training.

Objectives:

Holders of the ESC develop an entrepreneurial mindset and have a great grounding in business skills, not to mention better chances when starting work. The ESC equips them to be enterprising either in their own business or when working for somebody else.

Start Date: 01/01/2004

Target group: Pupils from 14 years up

Why is this measure a success?

An ever-increasing number of learners both in Austria and abroad are getting business skills through the ESC. The ESC provides a solid basis for enterprise in the future. Giving young people such entrepreneurial skills gives them a broader range of career possibilities.

7.6 Lucy et Valentin ...créent leur entreprise !

Country: France

Contact details :

Responsible organisation: Ministère de l'économie, des finances et de l'emploi – DGCIS
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 Website of organisation www.lucyetalentin.com
 Responsible organisation : Agence pour la création d'entreprises
 Name and Surname of contact person: Virginie Dantard
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 City: Paris cedex 12
 E-mail of contact person: dantard@apce.com

Description of the measure:

“Lucy & Valentin... set up a business” is a teaching tool that combines comic strips and serious editorial content to encourage young people of 14 –15 to be enterprising and think about setting up their own company. Usable as either a stand-alone module or as part of a classroom activity, it gives a dynamic, positive and pragmatic insight into business and entrepreneurialism. It also helps teachers address an issue they are generally not well informed about. The comic strip is divided into 10 parts, for each stage that Lucy and Valentin, the two enthusiastic young protagonists, go through in setting up their own sportswear company. It basically describes how to set up a business in 10 stages.

Objectives:

Young people have a very incomplete and – to say the least – distorted view of what’s involved in setting up your own company. The goal is to remedy this unfavourable attitude through a tool - the comic strip – that’s both fun and pedagogical, even for the youngest audience, and conducive to raising awareness ...

Start Date: 01/06/2006

Target group: Young people of 14 and 15 and their teachers

7.7 Kitzbüheler summer university for entrepreneurship

Country: Austria

Contact details:

Responsible organisation: Initiative für Teaching Entrepreneurship
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Description of the measure:

The Kitzbüheler summer university for entrepreneurship offers teachers the opportunity to work on their own ideas and seeks to be a catalyst for entrepreneurship education in economics teaching and in other areas. The aim is to give the participants a dynamic forum in which to exchange ideas. The summer university is a school with a vision in the mountain setting of Hochkitzbüchel. The faculty are lecturers in teaching methods, experts on entrepreneurship education and well-known Austrian entrepreneurs.

Objectives:

The aim of the summer university is for the participating teachers themselves to develop an idea and to have an entrepreneurial experience, so that they can provide practical support to their students. A conscious decision was made to move the seminars to a mountain setting, so that the teachers are removed from their everyday environment.

Start Date: 02/07/2001

Target group: Teachers (primarily those educating 15 to 19-year olds)

Why is this measure a success?

Evaluation by the participants. The fact that this is an in-service programme makes the topic more relevant and has been commented on by many participating teachers.

7.8 Unternehmergeymnasium Bayern, Entrepreneurial Grammar School Bavaria

Country: Germany

Contact details:

Responsible organisation: Unternehmergeymnasium Bayern

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City: Pfarrkirchen

E-mail of contact person: bart@unternehmergeymnasium.de

Website of organisation: www.unternehmergeymnasium.de

Description of the measure:

UG Bavaria is a grammar school specialising in entrepreneurial education that helps students from 10th grade onwards to build up an independent living, together with leadership skills, while completing their school qualifications. Students benefit from workshops with experienced entrepreneurs, as well as a network of 80 companies and educational institutions. Students also get hands-on experience with projects such as providing food for their school lunch.

Start Date: 01/09/2005

Target group:

Students from 10th grade (high school) onwards

Why is this measure a success?

The project has set a new trend in Bavaria as well as in business education in other German regions.

7.9 Programme for the promotion of the entrepreneurship

Country: Spain

Contact details:

Responsible organisation: The Department of Industry & Employment of the Government of the Principality of Asturias

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City: Oviedo

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Website of organisation: www.emprendeastur.com

Description of the measure:

The programme provides resources to facilitate the adoption of entrepreneurial approaches in the education system. The programme encompasses all levels of the education system. Main actions include: design of teaching resources, teacher training and guidance. Primary Education. “Emprender en mi escuela”. Pupils start up and manage a mini-company. Secondary Education. “Empresa Joven Europea”. Students start-up and manage a mini-company. Upper Secondary Education – Vocational Education & Training. “Entrepreneurs’ workshop”. Students with a flair for entrepreneurship are given information, advice and support to develop their own business ideas. Best business ideas are awarded every year. Vocational Education and Training. Students start-up and manage a small enterprise.

Objectives:

To raise awareness of entrepreneurship among the educational community To disseminate the concept of entrepreneurship and motivate the whole society. To provide schools and teachers the appropriate resources for the promotion of entrepreneurship in the education system.

Start Date: 01/01/2004

Target group:

Programme for the promotion of entrepreneurship in the education system is aimed at the school community as a whole: Students/pupils, teachers and families. Different actions are delivered in Primary, Secondary, Upper Secondary, VET and Higher Education.

Why is this measure a success?

It provides opportunities for students to experience entrepreneurship during school hours at every level of the education system. Empresa Joven Europea, the secondary education project has been fully embedded in the curriculum of the region. Long-term sustainability is ensured via 4-year funding schemes. Headmasters, teachers and parents acknowledge the importance of entrepreneurship

7.10 Øresund Entrepreneurship Academy

Country: Denmark

Contact details:

Responsible organisation: Øresund Entrepreneurship Academy

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Description of the measure:

Øresund Entrepreneurship Academy is a cross-border Danish and Swedish initiative under Øresund University. The overall purpose of the Academy is to create economic growth in the Øresund Region. The Academy aims to establish the Region as an internationally recognised centre of entrepreneurship education. Thus, the Academy works to help the universities in the region to offer entrepreneurship education of high quality and to motivate the students to do entrepreneurship courses.

Objectives:

Increase the amount of students how participate in entrepreneurship education at the 11 universities in the Øresudn region from 2% in 2006 to 15 % in 2015.

Start Date: 10/11/2006

Target group: 150.000 students at the 11 universities in the Øresund Region

Why is this measure a success?

It matches upper level international standards

7.11 Further good practice examples

These good practices have been selected from the EU SME Policy good practices catalogue, which can be found at : <http://ec.europa.eu/enterprise/policies/sme/best-practices/database/SBA>.

Good practices identification is a continuous effort and particular focus will be given to those practices which have been funded from structural funds. As part of this series there will also be a guidebook on how to write applications for projects financed from the Structural Funds.

Updated information on this initiative will be available from the Commission Website. For further information visit : <http://ec.europa.eu/enterprise/policies/sme/regional-sme-policies>.

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