



Towards Greater Cooperation and Coherence in Entrepreneurship Education



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Report and Evaluation of the Pilot Action *High Level Reflection Panels on Entrepreneurship Education* initiated by DG Enterprise and Industry and DG Education and Culture

March 2010

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Acknowledgements and Disclaimer

This report is the result of the project "High Level Reflection Panels on Entrepreneurship Education" carried out by the Commission under the Competitiveness and Innovation Framework Programme – CIP (2007-2013), with the technical assistance of ECOTEC Research & Consulting Ltd. The report was written by ECOTEC under the guidance of the Commission. The content is a structured, succinct summary of the project, based on the individual reports of the 4 meetings, the information contained in questionnaires filled in by participants, additional information on good practices previously collected by the Commission and verbal and written input by the participants and speakers at all the meetings. Due to the required conciseness and in order to maintain a clear structure, not all the information provided by participants has been included in the report.

Although the work has been carried out under the guidance of Commission officials, the views expressed in this document do not necessarily represent the opinion of the European Commission.

The authors would like to express their appreciation and gratitude to the participants of the High Level Reflection Panels for their support and cooperation in the production of the Panels and of this report. We would also like to express our thanks to those who worked 'behind the scenes' with us in order to make the HLRPs a reality, and to Ron Botham and Professor Prue Huddleston for providing expert inputs.

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Information on this project:

The specific reports of the 4 "High Level Reflection Panels" held in London, Stockholm, Prague and Rome can be found on the web – together with additional information on those events - at the following address:

http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/education-training-entrepreneurship/reflection-panels/index_en.htm

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Executive Summary

1. Purpose of the Report: Findings and Conclusions from the High Level Reflection Panels

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.

Building on developments that have been in train since the late 1990s, in 2009 the European Commission carried out a pilot action that brought together senior officials from the ministries of education and enterprise of EU Member States and EEA countries (Iceland and Norway), along with representatives from stakeholder groups such as business organisations and teachers' trades unions. The aims were: 1) to review what has been achieved so far in entrepreneurship education in each participating country, and 2) to discuss the means and ways to develop more systematic approaches to the development and delivery of policy and practice in entrepreneurship education, as well as to raise the profile of and build momentum behind entrepreneurship education in national and regional policy. The mechanism selected to do this were four workshops, or High Level Reflection Panels, each of which was attended by ministry officials from clusters of seven or eight EU/EEA countries, along with representatives from stakeholder bodies. This report, written by ECOTEC Research & Consulting Ltd, presents the proceedings of these workshops and draws final conclusions from them.

The report provides:

- The findings from the Panels 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 EU level to support developments within Member States.

2. The State of Play: Entrepreneurship Education in 2009 - An Uneven Landscape

The High Level Reflection Panels found 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, risk-assessment, creativity, and specific business skills and knowledge. It should no longer be just an extra-curricular activity, but instead be embedded in the curriculum across all educational levels/types.

However, the level of progress made in national strategy development and implementation is highly variable. Only a minority of countries have well developed strategies. Typically they provide broad frameworks for action, with the setting of specific targets and indicators being rather under-developed. In general, there is a significant need for Member States to embed and deepen implementation of entrepreneurship education.

Much entrepreneurship education practice tends to be ad hoc, varies vastly in quantity and quality, is not treated systematically in the curriculum, and has relied heavily on the enthusiasm and commitment of individual teachers and schools. Some activity is structured and ambitious; much is not; some schools have no entrepreneurship education at all. There are pockets of excellence, and a number of advanced countries.

Teachers and schools have a critical role, supported by private businesses and non-profit organisations, which may provide 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.

To move 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 the local community and 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.

3. Towards a Progression Model for Greater Cooperation and Coherence

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.

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

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:

- I. **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.

- II. **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.
- III. **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 EUROOPEN which are key in providing opportunities for practical, experiential learning, like mini-enterprises and virtual companies.
- IV. **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.
- V. **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.

5. Taking Forward the Entrepreneurship Education Agenda at the European Union Level

There was consensus amongst participants in the Panels 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.

It is proposed that the European Commission:

- I. acts as a key '**catalyst**', stimulating and accelerating developments by supporting the establishment of an observatory of policy and practice, and a research hub to collect and disseminate good practices, commission new research and develop frameworks, e.g. for monitoring and evaluation;
- II. builds '**platform**' mechanisms through which stakeholders – especially teachers and businesses - can come together at EU level to discuss and debate common issues. Such platforms can be both virtual (web-based), and/or based on real-life contacts (e.g. seminars, training, panels on specific themes, etc.). This involves both deepening the HLRP process, which provided a new and innovative arena to consider how to develop and implement strategies, as well as mobilising critical groups of stakeholders including teachers and businesses;
- III. develops an '**enabler**' role. This function involves mobilising the resources available through EU programmes to support activity, both at EU level and within Member States;
- IV. establishes a **European Centre for Entrepreneurship Education** as the main vehicle to implement the above activities, by leading developments at EU level as well as linking into national activities, observatories and hubs as they develop;
- V. **leads these actions through the Directorates General “Enterprise and Industry” and “Education and Culture”** and develops better coordination across the Commission, including with those other DGs with an important role, such as the DG “Regional Policy” and the DG “Employment, Social Affairs and Equal Opportunities”.

1 Introduction¹

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 with the passage of time. Globalisation has increased the pressures on economies to compete and innovate, and a vibrant base of creative and innovative entrepreneurs is critical to being able to meet the challenges of globalisation as well as to take advantage of the opportunities that arise from it. Entrepreneurs also create employment and welfare, and thus play an important role in the economic and social well-being of European citizens. The current economic downturn has only served to accentuate the need for the development of a wider, more solid base of European entrepreneurs.

In response to these issues, the European Commission and individual Member States have adopted a range of measures. Key amongst these is the building of a stronger culture of entrepreneurship and 'entrepreneurial mindsets', particularly among young people. Education and training are key drivers in this process.

Since the late 1990s Member States of the EU have been seeking the development of education and training for entrepreneurship. Yet evidence of concerted attempts to establish entrepreneurship firmly within the structure and practice of national education systems has remained scarce. In response to this, in 2009 the European Commission initiated a pilot action that would bring together in a series of workshops senior officials from the ministries of education and entrepreneurship of EU Member States to discuss how to develop more systematic approaches to the development and delivery of policy and practice in entrepreneurship education, and to raise the profile of and build momentum behind entrepreneurship education in national and regional policy. This report presents the proceedings of these workshops and draws final conclusions from it.

1.1 A Developing Context

The context for the pilot action is provided by a range of policy measures at European level, commencing with the Lisbon Council in March 2000 which was the major political step to request the modernization of Member States' education and training systems. The European Charter for Small Enterprises (adopted in 2000²), set within the context of the Lisbon Strategy, committed Member States to 'nurture entrepreneurial spirit and new skills from an earlier age'. It acknowledged the need for 'general knowledge about business and entrepreneurship ... to be taught at all levels' along with 'specific business-related modules' to be an 'essential ingredient' of education at secondary level and above.

¹ This is the global (final) report of the contract: Implementation of the Small Business Act, Principle I. European High Level Meetings on Entrepreneurship Education. Assistance in setting up and evaluating a pilot action.

² European Charter for Small Enterprises. <http://ec.europa.eu/enterprise/policies/sme/best-practices/charter/>

In subsequent years, a range of good practices was identified in the Charter context³ and progress against the Charter's goals was reported on annually. In addition, a range of expert groups was convened and reports commissioned into a variety of subjects related to entrepreneurship education⁴. Together, these activities laid a foundation of expertise on which Member States could draw in their policies and practices. Around the same time, entrepreneurship became embedded in the *Recommendation on key competences for lifelong learning*⁵ which set out eight key competences that had been identified in cooperation with the Member States. Among them are digital competence, social, interpersonal and civic competence, cultural expression and sense of initiative and entrepreneurship.

In 2006 reporting on the Charter was incorporated into the reporting of the Lisbon Strategy, and the Commission Communication *Fostering entrepreneurial mindsets through education and training* was published⁶. It stated: '*Although numerous initiatives on entrepreneurship education are under way, they are not always part of a coherent framework.*' In its recommendations it called for the development of more systematic approaches and the establishment of cooperation between different ministries at national and regional levels. In October of the same year, the Oslo Conference on the theme of developing entrepreneurial mindsets led to the Oslo Agenda, advanced by a broad representation of stakeholders. The Oslo Agenda is a detailed catalogue of initiatives, designed as a menu from which policy makers can pick actions at the appropriate level and adapt them to their particular circumstances.

Notwithstanding the efforts made since 2000, the Spring Council of 2006 invited Member States to reinforce entrepreneurship education at all levels of education. In 2007, an assessment of progress in entrepreneurship education found that in only six EU Member States had entrepreneurship been embedded explicitly in national framework curricula in general secondary education, and that the means to implement it (teacher training, teaching materials) still needed to be stepped up⁷. The number of countries where entrepreneurship was well established in curricula was a minority. It also pointed out that incorporating entrepreneurship into the curriculum was necessary but on its own insufficient.

³ Charter good practices are available for every year since 2001 at:

<http://ec.europa.eu/enterprise/policies/sme/best-practices/charter/>

⁴ These include studies on mini-companies, and on entrepreneurship in higher education and the reports of expert groups on primary and secondary education. The key reference documents are available at:

http://ec.europa.eu/enterprise/policies/sme/documents/education-training-entrepreneurship/index_en.htm

⁵ EC, *Proposal for a Recommendation of the European Parliament and of the Council on key competences for lifelong learning*, COM(2005)548 final. Brussels, 10.11.2005.

http://ec.europa.eu/education/policies/2010/doc/keyrec_en.pdf

⁶ EC, (2006) *Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, Implementing the Community Lisbon Programme: Fostering entrepreneurial mindsets through education and learning*, COM(2006) 33 final, Brussels, 13.2.2006

⁷ EC, DG Enterprise and Industry (2007) *Assessment of compliance with the entrepreneurship education objective in the context of the 2006 Spring Council conclusions*. Brussels, November 27, 2007.

http://ec.europa.eu/enterprise/policies/sme/files/support_measures/training_education/doc/edu2006_en.pdf

Equally important were measures to incentivise and support the development of entrepreneurship by schools and teachers as well as to include businesses and non-profit organisations to bring in content and practice from business life; in general these measures remained underdeveloped.

1.2 The Need for the Pilot Action

In essence, the above mentioned findings pointed to the fact that entrepreneurship education comprises a variety of elements, all of which needed more development, more structure and more coherence if it were to be delivered more consistently and effectively to students across the different phases of education. They also highlighted the need for Member States to be supported in making progress on this important issue of common interest.

Since the 2006 Communication *"Fostering entrepreneurial mindsets through education and learning"*, the Commission in cooperation with Member States had identified the need for strong and well organised cooperation between relevant ministries in order to develop and implement effective entrepreneurship education. In particular, it had shown that progress starts from co-operation between different ministries, especially those responsible for enterprise and for education, while also involving relevant stakeholders from the business world, and should ultimately lead to a coherent and comprehensive approach to entrepreneurship education at all levels.⁸ However, despite the 2006 Communication, little progress had been made in this area. 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.

⁸ Commission Communication "Fostering entrepreneurial mindsets through education and learning". COM(2006) 33 final.

The Decision of the European Parliament and of the Council concerning the European Year of Creativity and Innovation (2008) again highlighted the role of entrepreneurship for personal development, as well as for economic growth and employment, and emphasised the need to foster entrepreneurial mindsets, particularly among young people.

In essence, then, two key goals resulted from the European Commission's work on entrepreneurship education:

- to develop greater co-operation between ministries responsible for entrepreneurship education, and between ministries and other relevant stakeholders; and
- to develop more systematic approaches to the development and delivery of policy and practice in entrepreneurship education.

The pilot action, of which this report is the concluding document, was designed to address both of these issues, bringing to high level policy makers in the Member States thorough analysis of the status quo of entrepreneurship education, the exchange of existing proposals and examples of good practice, the identification of development needs and the exploration of next steps to be taken in the immediate future.

1.3 The Pilot Action – a Series of High Level Workshops

The goals of the pilot action were to:

- stimulate increased and more structured inter-ministerial co-operation for entrepreneurship education within Member States;
- devise a mechanism for structured dialogue at EU level;
- enable more Member States to devise national action plans for entrepreneurship education, based on good practices in other countries and on ideas from the Oslo Agenda, involving all key actors; and
- test the feasibility of a wider and more systematic European policy approach or program in this area and identify key issues for concrete cooperation.

Four questions were developed to direct the workshops, reflecting the need to address both content and process, and to do so at both Member State and EU levels. They are shown in the box below.

Core Questions Addressed in the Pilot Action

1. How can **effective co-operation** among ministries and between ministries and other stakeholders be most effectively achieved to deliver effective Member State strategies for entrepreneurship education?
2. What principal components would need to be included within Member State education systems if **a more coherent and systematic approach to the teaching and learning of entrepreneurship** is to be put in place?
3. What should be the key features (principles and mechanisms) of a process that would support a sustainable, **structured dialogue and exchange of experiences about entrepreneurship education at EU level**?
4. In establishing a wider and more systematic **EU policy** to support entrepreneurship education, what should be the **main focus** and which elements should be most highly prioritised?

The chief vehicle of the pilot action was a series of four structured and facilitated workshops called High Level Reflection Panels (HRLPs). These workshops brought together senior officials from clusters of seven or eight EU/EEA countries⁹, along with representatives from stakeholder groups such as business organisations and teachers' trade unions at the European level. Each country was invited to send a delegate from two ministries: one responsible for education; and one from the ministry responsible for enterprise/entrepreneurship.

The table below shows the structure and timing of the sessions; a list of participants is provided in the Annexes. Each Panel was hosted by the responsible administration of a EU Member State, who was also invited to participate in the other meetings.

Cluster	Host Country	Venue	Date	Participating ¹⁰ Countries
West	UK	London	16-17 March 2009	Belgium, France, Netherlands, Luxembourg, Ireland, Iceland, United Kingdom
North	SE	Stockholm	23-24 April 2009	Denmark, Finland, Estonia, Latvia, Lithuania, Norway, Sweden
Central/East	CZ	Prague	25-26 June 2009	Austria, Czech Republic, Poland, Germany, Hungary
South	IT	Rome	15-16 October 2009	Bulgaria, Spain, Italy, Malta, Portugal, Romania, Slovenia

⁹ At the time of writing a fifth Panel is also envisaged for the Western Balkans, Turkey and Israel, to take place in early 2010.

¹⁰ Cyprus, Greece, Liechtenstein and Slovakia were invited but did not participate in this initiative.

The approach of using small clusters was adopted to establish a workshop atmosphere that facilitates interactive discussion, close dialogue, and collaboration and thus better mutual learning and support. ECOTEC Research & Consulting Ltd, the authors of this report, were commissioned to support the process. Details of the HLRPs, including a report of each meeting, are available at: http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/education-training-entrepreneurship/reflection-panels/index_en.htm.

It should be pointed out that the focus of the Panels was on formal school level education, with less regard being paid to higher education (HE). This focus was a consequence of three main factors: first, the fact that Panel process was designed to involve national ministry officials who – on the education side - overwhelmingly came from ministries with responsibility for schools, rather than HE; secondly, the focus of the Panels on national policy-making also emphasised schools given the high degree of autonomy exercised by higher education institutions; and finally, the schools focus reflects the fact that efforts are needed to develop entrepreneurship education at an early age and for all young people. The focus on schools is naturally strongly reflected in this report, but reference to higher education is included as it was nonetheless discussed at the Panels¹¹.

1.4 Purpose and Structure of this Report

This report has two main aims. First of all it **presents the overall conclusions from the pilot action, and builds on these to provide a framework for mapping the area of entrepreneurship education, building a strategy, priority setting and action.** Whereas each Panel has been the subject of a summative record of discussions, the purpose of this report is to capture and structure the insights generated in the lively, in-depth discussions and exchanges that took place across all four workshops (or "Panels"). Many of the points made in the report were already captured during the course of the Panels and reflected back to participants, helping to build consensus both about current positions and where to go next. **But this report goes further, using this material to propose a framework which it is hoped Member States will be able to use to help them move to the next stage in the development of entrepreneurship education.**

The second purpose of the report is to provide an assessment of the pilot action as a process. Bringing together ministries from different policy fields has been an innovation. We need to see what have been the strengths and weaknesses of the approach piloted during 2009 and what type of actions might be taken at EU level – with the support of the European Commission - to build on what has been learned. As well as gathering feedback from participants during and after the Panels, a final evaluation of the process has been carried out, and this provides input to considering possible future strategies and follow-up activities.

¹¹ It should also be pointed out that a detailed analysis of the situation in higher education is available in EC (2008) *Entrepreneurship in Higher Education, especially within non-business studies. Final Report of the Expert Group.* http://ec.europa.eu/enterprise/newsroom/cf/document.cfm?action=display&doc_id=3581&userservice_id=1&request.id=0

It is important to stress that the evidence base for this report is largely the HLRPs themselves, plus additional field and desk research by the authors to explore particular examples of good practice. It is not based on comprehensive research into entrepreneurship education. Rather, what the report seeks to do is to use the perspectives voiced by Panel participants to paint a picture and identify key patterns that would be recognised by players in the field, and then to provide both a framework for potential priority-setting and action going forwards, and also practical pointers to how progress might be achieved. It *builds on discussions* that have now taken place between ministries within Member States, and across countries within the EU/EEA. At the same time, the report is addressed not just to Panel participants but also to a wider audience, such as other ministries, local and regional authorities, teachers and business organisations.

The report is structured into the following main sections:

- **Section 2** discusses what for the purposes of this report is meant by entrepreneurship education and what it is intended to achieve in the context of current policies and lifelong learning strategies, laying out an intervention logic in light of the Panel discussions. It then goes on to look at the current situation across Europe, and discusses the need for intervention at national level, before concluding with a look at the state of play in relation to strategy development. This section should be of general interest to those active in the field.
- **Section 3** draws on the discussions of the Panels to present a progression model for entrepreneurship education which has been elaborated from the work that has taken place. It then examines the implications of the model in terms of the challenges and opportunities that will be faced moving forward. This section is likely to be of most interest to participants from the Panels, national and regional ministries, and social partner and other stakeholder organisations.
- **Section 4** takes its lead from the model and looks in more detail at some of the key elements that will need to be addressed in any attempt to develop greater structure and coherence, presenting practical 'how to' examples of good practice. It begins by describing the key elements required in national strategies and the sequence in which they shall be implemented. It then examines good practice in both policy and practice. This section is also likely to be of greatest interest to participants from the Panels, national and regional ministries, and social partner organisations.
- The **final section** of the report moves on to look at the pilot action as a process and how the agenda might be moved forward at EU level. It presents the outcomes of the global assessment of the pilot action and makes recommendations for follow-up activities. This part is addressed in particular to the European Commission.

2 The State of Play: Entrepreneurship Education in 2009 - 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 as revealed by the participants at the 2009 HLRPs. Cumulatively, the Panels enabled the building up of a picture of current activity, of the thrust of developing policies and of the ways in which the main players in entrepreneurship education are presently configured. 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 the basis of the views expressed during the course of the Panels, we are able to construct and present a broad 'intervention logic' for entrepreneurship education which currently underpins activity.

In the second part of the chapter we provide an overview of the key features of current practice in entrepreneurship education, and discuss the role of different players in those processes.

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

Finally, we conclude by looking at the current state of play in strategy development at national level in Member States.

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 Panel discussions and 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/Outcomes



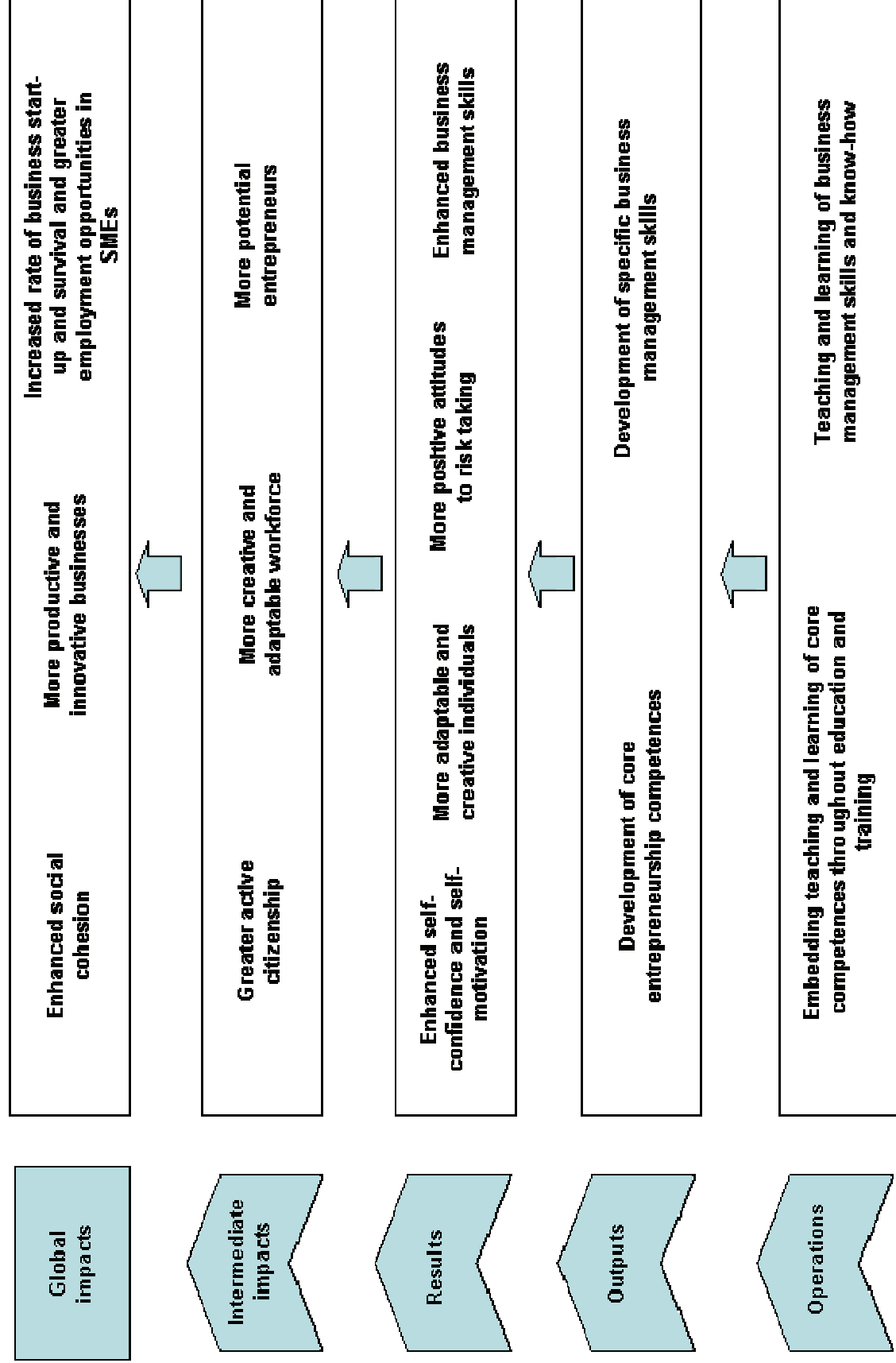
Sources: HRLP discussions; EC Key Competences for Lifelong Learning

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 we discuss 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.

Nonetheless the views expressed in the Panels revealed a high degree of common views about the intended goals of entrepreneurship education. 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 use¹². 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:**

- (i) **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

¹² This view resonates with other recent work, such as the 2009 report from the World Economic Forum which states: 'Helping young people liberate their innate entrepreneurial skills and learn about entrepreneurship calls for educational practices that differ in key ways from those used in workplaces, in universities, and in other adult learning environments. Doing so also means potentially radical changes to mass industrial-age primary and secondary education as it has developed in almost every country – entrepreneurship education must itself be entrepreneurial ...' (p. 29) World Economic Forum (2009) *Educating the Next Wave of Entrepreneurs: Unlocking entrepreneurial capabilities to meet the global challenges of the 21st century. A Report of the Global Education Initiative* World Economic Forum, Switzerland, April 2009.
http://www.weforum.org/pdf/GEI/2009/Entrepreneurship_Education_Report.pdf

- (ii) **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 Education¹³

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 factors¹⁴. 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 businesses¹⁵, and within an economic context characterised by a predominance of large firms and a large public sector.¹⁶

¹³ This section draws on the perspectives that emerged from the Panels and on the mind map that was developed and which is available in the Annex. The picture painted does not apply to all countries or localities/regions, and some countries are already moving beyond the features presented here. However, the picture certainly applies to entrepreneurship education as it is experienced by most of the *population* of the EU.

¹⁴ For comparative data, see Annex 3

¹⁵ A recent entrepreneurship survey in Sweden revealed a self employment rate amongst 18-30 year olds of just 4%, with only 32% of people in this age group stating that they prefer being self-employed over being employed.

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 UK¹⁷ 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 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.

Source: Presentation by Björn Sandström of the Swedish Agency for Economic and Regional Growth (Tillväxtverket) delivered to the HLRP second cluster meeting held in Stockholm 24th April 2009.

¹⁶ Presentation by Björn Sandström of the Swedish Agency for Economic and Regional Growth (Tillväxtverket) delivered to the HLRP second cluster meeting held in Stockholm 24th April 2009.

¹⁷ See, for instance, Bennett RJ and McCoshan A (1993) *Enterprise and Human Resource Development: Local Capacity Building*

- EUROOPEN, 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. EUROOPEN'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 policy¹⁸.

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.

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)**¹⁹, 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.**

¹⁸ 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.

¹⁹ The age at which school-based IVET commences varies across EU Member States.

The incidental and unsystematic nature of much current practice means that the quality and depth of entrepreneurship education depends 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 upwards²⁰ but it resulted in an increase in the number of schools providing enterprise education from 10 to 90% in the five years to 2008²¹.

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 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: of the 26 countries participating in the HLRP process, around a third have produced a specific and separate national entrepreneurship education strategy document.²² In a further eight countries national strategies or similar policy documents are either currently in development or are planned.

²⁰ See, for example, Bennett, RJ and McCoshan A (1993) *Enterprise and Human Resource Development: Local Capacity Building*

²¹ UK Government, Her Majesty's Treasury (2008) *Enterprise: Unlocking the UK's talent*. <http://www.hm-treasury.gov.uk>

²² See Annex 4

Strategies are in preparation in Denmark and Estonia. New Action Plans are going to be launched in Finland and Norway. In Austria a national action plan is in preparation, with the objective of expanding entrepreneurship education and – in addition to vocational and commercial schools where it is already part of the curriculum - to include all types of secondary education. In Malta, a reform of the curriculum is under way that will increase the presence of entrepreneurship.

Nine countries have chosen to take the route of embedding enterprise education within wider strategies or related policy documentation. Most commonly this is as part of wider lifelong learning or education strategies (as in the cases of the Czech Republic and Luxembourg) with, in a small number of cases, entrepreneurship being found in wider strategies around entrepreneurship, innovation and/or competitiveness (e.g. in Estonia's research and innovation strategy, *Knowledge Based Estonia 2007-2013*, the UK's 2008 cross-government enterprise strategy: *Enterprise: Unlocking the UK's Talent*, and Bulgaria's *National Innovation Strategy*). However, adopting this approach does not preclude countries from developing freestanding entrepreneurship strategies and/or policy documents at a later date in addition to this 'embedding' approach.

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 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.²³ 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.

²³ It should be noted that there is no specified funding allocation covering the plan as a whole.

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"*²⁴. 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"*²⁵, 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), 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;²⁶ and
- In-service training/learning – Kitzbühl Summer School for secondary level entrepreneurship education, focusing on hands-on exercises, tools and methodologies.

²⁴ Elisabeth Rønnevig, adviser at the Norwegian Directorate for Education, Training and Work at the Ministry of Education and Science, <http://forum.reteimprese.it/norway-never-too-early-to-start-entrepreneurship-learning-t9903.html>

²⁵ Presentation by Annika Rosing at the HLRP in Stockholm

²⁶ http://www.eesi-impulszentrum.at/index2.php?Entrepreneurship-Symposien:Symposium_in_Graz_7.5.2009

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;
- 03-Loep: "Entrepreneurial Spirit Magnifying Glass" is a screening instrument that permits measuring to what extent educational projects develop the spirit of entrepreneurship; and
- ENTRE-mirror is a self-assessment tool to assess personal development of entrepreneurial competences.²⁷

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

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 through the pilot action and HLRP events, 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.

²⁷ <http://publiek.syntra.be/websites/europeseprojecten/SEET/Shared%20Documents/Copie%202%20baseline%20study%20on%20Enterprise%20Education-flanders.pdf>

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.

Table 3.1 A Progression Model for Entrepreneurship Education Ecosystems in Europe

Stage	Pre-strategy (based on individual initiative)	Initial Strategy Development	Strategy Implementation and Consolidation & Development of Practice	Mainstreaming
Indicative timeframe	Starting position	0- 2 years ...	c. 2-5 years ...	c. 5 years +
National²⁸ strategy, frameworks	<p>No formal strategy in place. Entrepreneurship education covered – if at all – in disparate policy documents.</p> <p>Little or no effective inter-ministerial cooperation.</p> <p>No or rudimentary platforms for dialogue with relevant social partners.</p>	<p>Development and promulgation of strategy, with identification and agreement of entrepreneurship education objectives and of competences, roles and responsibilities of key players.</p> <p>Mechanisms being established for cooperation between key ministries.</p> <p>Platforms being established to include wider stakeholders.</p> <p>Vision (and intended outcomes) in process of being determined, which may involve reconciling competing agendas within government and between public and private sectors etc.</p> <p>Mapping and analysis of entrepreneurship education. Good practice examples being identified.</p> <p>Collection of effective teaching methods and materials.</p>	<p>Specification of learning outcomes, objectives, indicators and targets.</p> <p>Methods being developed for assessing learning outcomes; and development of appropriate qualifications.</p> <p>Regular cooperation mechanisms being embedded at various levels of system, with relative roles and responsibilities of different stakeholders clearly defined and accepted.</p> <p>Development of funding streams: allocation of dedicated resources.</p> <p>Implementation support mechanisms being put in place. Resource banks of teaching materials available, Dissemination and broad-based application of the effective teaching methods identified.</p> <p>Research base being developed.</p>	<p>On-going monitoring and regular evaluation of entrepreneurship education in terms of quality of activity and learning outcomes being achieved.</p> <p>Implementation support mechanisms part of everyday teacher and school development; entrepreneurship education fully integrated into initial teacher training for every teacher.</p> <p>Continuous application and refinement of effective teaching methods.</p> <p>Robust funding mechanisms established.</p>

²⁸ 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
Indicative timeframe	Starting position	0- 2 years ...	c. 2-5 years ...	c. 5 years +
		Launching of communications campaigns to stimulate interest of business community. Awareness raising with teachers.		
Schools	<p>Penetration of entrepreneurship education highly variable; much ad hoc activity. Tends to be an 'add on' to the mainstream curriculum with emphasis on 'entrepreneurship' as running a business.</p> <p>Tends to be focused in secondary education and in specific subjects.</p> <p>No or sporadic formal assessment of learning outcomes. Use of (unaccredited) prizes and awards to recognise achievement.</p>	<p>Role of schools articulated in strategy – recognition of central role</p> <p>Entrepreneurship education starting to be developed across the curriculum as an embedded set of competences, not just as a separate subject.</p> <p>Development of entrepreneurship education beyond secondary level especially, e.g. at primary level; and school clustering.</p>	<p>Entrepreneurship education being made available in every school, embedded within the curriculum as part of the overall teaching concept and also as a separate subject.</p> <p>Progressive establishment of partnerships with businesses in all schools (e.g. through pilots).</p> <p>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>High quality entrepreneurship education being made available to every student in every phase/type of education.</p> <p>Clear linkages established between different phases/types of education.</p> <p>Progressive development of wider linkages as part of development of local entrepreneurship ecosystem</p> <p>Learning outcomes assessed.</p>
Teachers	<p>Strong reliance on individual teacher's enthusiasm.</p> <p>Entrepreneurship education often delivered outside core school hours as extra-curricular activity.</p> <p>Teacher training very limited. No or little in-service training.</p>	<p>Role of teachers articulated in strategy – recognition of central role.</p> <p>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).</p> <p>Use of pilots to spread good practice and increase numbers of teachers engaging with entrepreneurship education agenda.</p>	<p>All teachers receiving entrepreneurship education as an integral part of their initial and their continuous in-service teacher training.</p> <p>All teachers teaching entrepreneurship education as integral part of the curriculum.</p>

Stage	Pre-strategy (based on individual initiative)	Initial Strategy Development	Strategy Implementation and Consolidation & Development of Practice	Mainstreaming
Indicative timeframe	Starting position	0- 2 years ...	c. 2-5 years ...	c. 5 years +
			Initial or in-service training on entrepreneurship made available to all interested teachers.	
Regional and local authorities ²⁹	Patchy involvement: some authorities involved in development of local partnerships; others not involved at all.	(Potential) role of local authorities considered in strategy development process. Development of good practice examples of schools clusters and education-business partnerships at local level.	Local authorities playing an increasingly important role in school cluster development and education-business links.	Full participation of local authorities in organizing entrepreneurship education. Possible establishment of statutory requirement for organisation of partnerships based on municipality geography.
Businesses, private associations and organisations	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.	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.	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.	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.

²⁹ 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 implementation³⁰.

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

³⁰ 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.

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.

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**³¹, 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'.

³¹ 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 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.

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) (an overview of such sources is provided in Annex 2).

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 se³².

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.

³² 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

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 EUROPEN 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. It pulls together the insights from the Panels and good practice examples cited both during the Panels and elsewhere (such as in the good practice lists assembled in the context of the European Charter for Small Enterprises.)

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

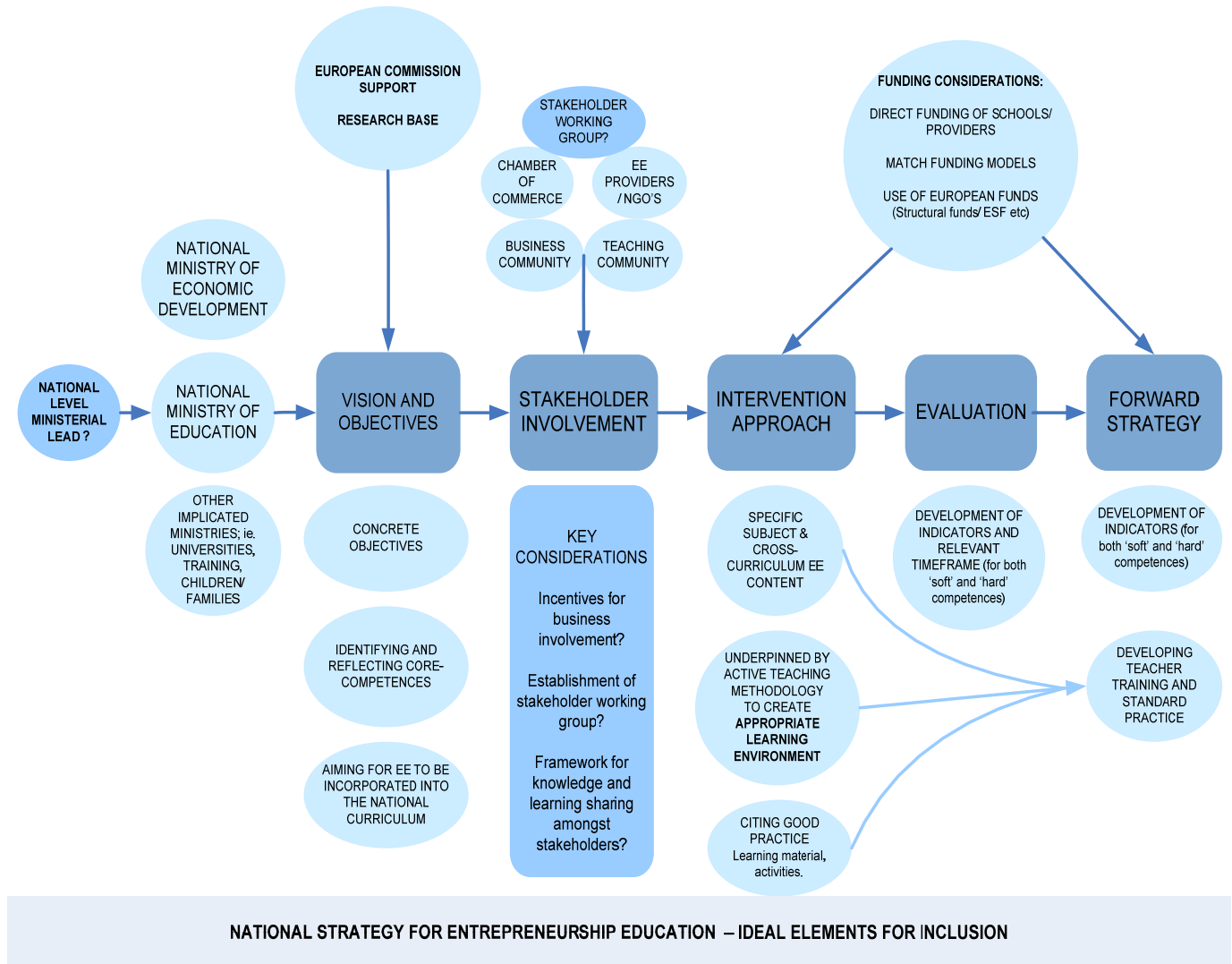


Table 4.1 The Main Elements of an Ideal National Entrepreneurship Education Strategy

Key Element	Detail
1. An agreed definition of terms of reference – what is Entrepreneurship Education?	Ideally this should build from the Oslo Agenda 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.

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, for all countries participating in the HLRP process (with the exception of the Netherlands and Poland), **it is the Ministry of Education that takes primary responsibility for the entrepreneurship education agenda.**³³ 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/trade³⁴ 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.

³³ 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.

³⁴ 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.

Strategy for Entrepreneurship in the Field of Education – The 2009 Sweden National Strategy³⁵

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 (*"See the Opportunities and make them Work"* 2004-2008, revised in 2006³⁶) 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 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.

³⁵ <http://www.sweden.gov.se/content/1/c6/12/99/99/e6e61481.pdf>

³⁶ See paper reporting the results of the 2006 Oslo Conference

See the Opportunities and Make Them Work: Norway's Strategy for Entrepreneurship in Education and Training 2004-2008 (revised 2006)³⁷

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.

³⁷ http://www.regjeringen.no/upload/KD/Vedlegg/Grunnskole/Strategiplaner/See_the_opportunities_and_make_them_work_2204-2008.pdf

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 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.

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

It is also clear that advancing this agenda, and developing effective 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, the Ministry of Economy created two foundations for the promotion of entrepreneurship education: the International Danish Entrepreneurship Academy (IDEA) and the Foundation for Entrepreneurship Activities and Culture.

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 Policy³⁸; 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.

³⁸ For 2008-2011 the Action Plan for the NL E&E programme has €33 million allocated (includes primary, secondary and HE).

Contrasting Approaches to Entrepreneurship Education in Different Contexts

A Mature Context Approach: The Netherlands

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.

Contrasting Approaches to Entrepreneurship Education in Different Contexts

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 networks: Emax Nordic 2010 will take place in Denmark³⁹.

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. Schools now receive some £55 million a year to provide enterprise learning for students aged 14-16, although this is included as part of mainstream funding. This approach is 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.

³⁹ <http://www.emaxnordic.com>

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'.**

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, 2007⁴⁰) 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 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".

⁴⁰ The Introduction of Entrepreneurship in Contemporary Swedish Education Policy: Ugly duckling or Beautiful Swan? Conference: ECER 2008, From Teaching to Learning?

Research on teachers' perspectives in Finland⁴¹ 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 everyday 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.

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. The European Trade Union Committee for Education has highlighted the need to invest in raising the standards within the teaching professions and to attract high calibre graduates into the profession⁴². 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.

⁴¹ Bettina Backström-Widjeskog, HLRP, Stockholm.

⁴² HLRP, Rome

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"⁴³ 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 schools⁴⁴. 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.

⁴³ http://ec.europa.eu/enterprise/enterprise_policy/charter/gp/index.cfm?fuseaction=practice.detail&gp_pk=1811&

⁴⁴ http://ec.europa.eu/enterprise/enterprise_policy/charter/gp/index.cfm?fuseaction=practice.detail&gp_pk=1970&

Teacher Training in Austria

In Austria the Initiative for Teaching Entrepreneurship (IFTE) has been created to develop and provide teacher training and each year it runs a Summer School for Entrepreneurship in Kitzbühl. 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.⁴⁵

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.

Developing Entrepreneurship Education 'Champions'

Another area where teacher training is important is in the development of more senior staff, who can become 'champions' for entrepreneurship within their schools. In the UK, HTI, a not-for-profit organisation working in the field of leadership development at the interface between education and business operates a range of programmes to engage business leaders in an ongoing partnership with the education sector⁴⁶. Activities include the "Stretch" programme that supports secondments of senior teachers into businesses (for periods ranging from four weeks to six months or longer), and the "Take5" initiative which helps businesses to develop their staff through challenging assignments in the education sector.

⁴⁵ <http://www.ifte.at>

⁴⁶ <http://www.hti.org.uk/html/be/be202.html>

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.

Supporting Teachers through a 'Fruit Basket' of Materials: An Example from Sweden

In Sweden, the non-profit *Framtids Frön* or "Future Seeds" initiative offers teachers of 6-16 year olds a 'fruit basket' of resources from which they can select the most suitable for their students and teaching methods. Several programmes are offered, designed to help schools to work in a more entrepreneurial way, linked to specific elements of the existing curriculum including: developing curiosity and a desire to learn; developing children's own ways of learning; learning to use knowledge to formulate and test hypotheses; problem-solving; children reflecting on their own learning experiences, and learning to work both independently and with others. The objective is to offer a knowledge base to inspire students, teachers and other school staff to develop and reinforce their entrepreneurial ability.

In Scotland, Enterprising Careers⁴⁷ provides a range of support to teachers delivering "enterprise education". In common with the *Framtids Frön* example described above, 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).

⁴⁷ Centre for Studies in Enterprise, Career Development & Work, University of Strathclyde
<http://www.strath.ac.uk/enterprisingcareers/aboutus/>

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!")⁴⁸ 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. The Department for Children, Families and Schools (DCFS) hosts two resource sites which provides teachers with teaching resources – The Standards Site⁴⁹ - and access to contemporary research – The Research Informed Practice Site (TRIPS)⁵⁰. These in turn are supported locally by a comprehensive set of resource sites – for example, the Lancashire Grid for Learning⁵¹. A further on-line resource in the UK is provided by the privately owned and operated *Times Educational Supplement*⁵² which shares through its network over 40,000 free teaching resources and lesson plans, including many relevant to entrepreneurship education. 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.

⁴⁸ Ministry of Economy, Finance and Employment; http://ec.europa.eu/enterprise/enterprise_policy/charter/gp/index.cfm?fuseaction=practice.detail&gp_pk=5450&tr_pk=4091

⁴⁹ www.standards.dcsf.gov.uk

⁵⁰ www.standards.dcsf.gov.uk/research

⁵¹ <http://www.lancsngfl.ac.uk/>

⁵² www.tes.co.uk

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)⁵³ 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 EUROOPEN) 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.

⁵³ <http://www.intre.ie/>

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.

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

DREAM⁵⁴ 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")⁵⁵, 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 Investments⁵⁶, 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 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.

⁵⁴ <http://www.dreamday.be/fr/index.html>

⁵⁵ <http://eduscol.education.fr/pid23542-cid45666/semaine-ecole-entreprise.html>

⁵⁶ http://ec.europa.eu/enterprise/enterprise_policy/charter/gp/index.cfm?fuseaction=practice.detail&gp_pk=1974&

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 site⁵⁷ 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 initiative⁵⁸. 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.

⁵⁷ <http://www.kvkstartersspel.nl/demo/#>

⁵⁸ DG Enterprise and Industry (2005) Best Procedure Project: Mini-Companies in Secondary Education http://ec.europa.eu/enterprise/newsroom/cf/itemshortdetail.cfm?item_id=3358

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*

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%)⁵⁹.

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 firms⁶⁰. 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.

⁵⁹ The evaluations were carried out by the Nord-Trøndelags Research Institute, see Kovereid and Alsos, 2003.

⁶⁰ http://ec.europa.eu/enterprise/enterprise_policy/charter/gp/index.cfm?fuseaction=practice.detail&gp_pk=1713&

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 countries⁶¹.

Virtual Firms in the Czech Republic

The main goal of the "Virtual Firm" project in the Czech Republic⁶² 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.

In Spain the "*Emprender en mi escuela*" ("Enterprising in my school") and "*Empresa Joven Europea*" ("Young European Enterprise")⁶³ 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

⁶¹ <http://cms.europen.info/>

⁶² http://ec.europa.eu/enterprise/enterprise_policy/charter/gp/index.cfm?fuseaction=practice.detail&gp_pk=1697&

⁶³ http://ec.europa.eu/enterprise/enterprise_policy/charter/gp/index.cfm?fuseaction=practice.detail&gp_pk=4770&

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)⁶⁴. 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 EUROPEN, 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 EUROPEN 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 programme⁶⁵.

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 Programme⁶⁶ is integrated into 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).

⁶⁴ JA-YE Europe is the European arm of JA Worldwide, which serves 98 countries

⁶⁵ <http://www.europen.info/Leonardo/index.html>

⁶⁶ http://ec.europa.eu/enterprise/enterprise_policy/charter/gp/index.cfm?fuseaction=practice.detail&gp_pk=4330&

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 education⁶⁷, 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 ASBL⁶⁸ (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 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.

⁶⁷ www.valnaloneduca.com

⁶⁸ 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.

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 Village⁶⁹ 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.

⁶⁹ www.enterprisevillage.org.uk

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 centres⁷⁰ 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 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.

⁷⁰ http://ec.europa.eu/enterprise/enterprise_policy/charter/gp/index.cfm?fuseaction=practice.detail&gp_pk=1870&

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.

Table 4.1 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 at the European Union Level

Key Points from Chapter 5

The HLRP pilot action followed a developing set of actions at EU level, but it provided a new and innovative arena to consider how to develop and implement strategies.

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.

It is proposed that the European Commission:

- acts as a key '**catalyst**', stimulating and accelerating developments by supporting the development of an observatory of policy and practice, and a research hub to collect and disseminate good practices, commission new research and develop frameworks, e.g. for monitoring and evaluation;
- builds '**platform**' mechanisms through which stakeholders – especially teachers and businesses - can come together at EU level to discuss and debate common issues. This involves both deepening the HLRP process, as well as mobilising critical groups of stakeholders including teachers and businesses;
- develops an '**enabler**' role. This function involves mobilising the resources available through EU programmes to support activity, both at EU level and within Member States, in such areas as the development and dissemination of teaching materials and methodologies, and teacher training, e.g. through seminars and workshops;
- establishes a **European Centre for Entrepreneurship Education** as the main vehicle to implement the above activities, by leading developments at EU level as well as linking into national activities, observatories and hubs as they develop;
- **leads these actions through the Directorates General “Enterprise and Industry” and “Education and Culture”** and develops better coordination across the Commission, including with those other DGs with an important role, such as the DG “Regional Policy” and the DG “Employment, Social Affairs and Equal Opportunities”.

5.1 Introduction

In the preceding sections of this report we have predominantly focused on setting out ways in which actors within Member States have been taking forward the development of entrepreneurship education. In this final section, we move to the EU level, to look at how the agenda should be taken forward in light of a consideration of the Panel discussions and the model that has been laid out in chapter 3.

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 'dirigiste' approach.

In addition to these considerations, we have taken into account the suggestions made by participants at the Panels in formulating the recommendations for EU action that we make below. Indeed, the Panels produced a significant number of proposed actions for the EU to take forward (summarised in Annex 6 'Summarising the conclusions from the Panels'). These propositions have been gathered and collated and provide the basis for the proposals set out below, having been 'tested' against a range of factors including general practicability/feasibility (in particular in light of the scope for EU action in this field provided through the open method of coordination), the current state of play in the field, and the progression model that has been sketched out.

The chapter is structured as follows: it begins by looking at the consequences for policy development flowing from the Panels. It then moves on to look at the practical ways in which the EU could provide support.

5.2 Policy Implications of the Panels

As we indicated at the start of this report, the HLRPs have taken place after a period of policy development at European level. As the table below shows, thinking on entrepreneurship education has taken place in a variety of contexts, and the Panels provided a new and innovative arena in which consideration could be given to specific goals in the field.

Table 5.1 Entrepreneurship Education Policy Development: The Last 10 Years

Year	Policy level activity	Key feature relating to entrepreneurship education
2000	European Charter for Small Enterprises	Committed Member States to 'nurture entrepreneurial spirit and new skills from an earlier age' and called for 'general knowledge about business and entrepreneurship ... to be taught at all levels' along with 'specific business-related modules' to be an 'essential ingredient' of education from secondary level onwards.
2003	Green paper – Entrepreneurship in Europe	'Education and training should contribute to encouraging entrepreneurship by fostering the right mindset...and skills'.
2004	Action Plan: The European Agenda for Entrepreneurship	Strategic Policy Area 1 – 'Fuelling Entrepreneurial Mindsets'.
2006	Commission communication - Fostering Entrepreneurial mindsets Through Education and Learning	'National authorities should establish co-operation between departments leading to developing a strategy with clear objectives'.
2006	Renewed Lisbon Strategy	'Underlines the need of creating an overall entrepreneurial climate...and therefore invites MS to strengthen respective measures, including through entrepreneurship education.
2006	Recommendations for Key Competences in Lifelong Learning and Youth in Action	Objective - encouraging creativity and spirit of initiative and enterprise.
2006	Oslo Agenda for Entrepreneurship Education in Europe	'The aim is to step up progress in promoting entrepreneurial mindsets in society, systematically and with effective actions'.
2008	Small Business Act – Think Small First	Principle 1: Create an environment in which entrepreneurs and family businesses can thrive and entrepreneurship is rewarded.

In the context of this history of policy development, it is important to record that, even though the HLRP participants were deliberately drawn from a diverse set of backgrounds, there was 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.

5.3 The Role of the European Union

Within this broad policy context, there are a variety of ways in which the EU can support activity. Panel participants suggested a large number of possible ways in which this could take place, and expressed strong support in particular for the following roles: gathering and disseminating good practice; supporting the development of teacher training and didactic material; gathering, commissioning and disseminating research; and facilitating and/or leading the development of networks or platforms for cooperation and exchanges, including the continuation of the Panels. They also supported mechanisms such as bringing together experts, and teacher exchanges.

Looking at the position of the European Commission more generally, we can see that it has a variety of tools at its disposal which broadly speaking consist of the sort of mechanisms available via the open method of coordination to shape developments in Member States through to the programming and financing of programmes like the European Social Fund (ESF). Importantly, the EU does not of course have a statutory role to play in relation to education⁷¹, but there are nonetheless significant ways in which it could act to support action in the field of entrepreneurship education.

We have identified three functions that the European Commission (EC) could perform:

- a **'catalyst'** function in which the EC stimulates and accelerates activity. Activities here include the collection and dissemination of good practices, commissioning new research and developing frameworks, e.g. for monitoring and evaluation;
- a **'platform'** function. Here the EC provides the means by which stakeholders can come together at EU level to discuss and debate common issues. This involves both deepening the Panel process, as well as mobilising critical groups of stakeholders including teachers and businesses;
- an **'enabler'** function. This function involves mobilising the resources available through EU programmes to support activity, both at EU level and within Member States.

These areas overlap, and hence if all were enacted, considerable additional benefits would be generated through their mutual reinforcement. A key vehicle through which this could be achieved would be through the establishment of a **European Centre for Entrepreneurship Education**. This could provide:

- an observatory of policy and practice to gather, disseminate and recognise good practices (e.g. through awards), and to monitor progress across the EU and globally;
- a research and development hub through which original research could be commissioned and existing expertise brought together, also aiming to support teacher training and produce or disseminate didactic material;
- a vehicle for facilitating discussions and networking between stakeholders, including teachers and businesses; and
- a mechanism for promoting, developing and coordinating funding opportunities through EU programmes and initiatives.

⁷¹ Only in vocational education and training is there a legal basis for the EU to have a policy but even here it must work through the Open Method of Coordination

Such a facility would lead developments at EU level but would also engage with the development of similar activities within Member States. It would seek to link into such nationally based observatories and research hubs as they develop.

In the following sections, we examine in more detail the activities that need to be taken forwards.

5.3.1 The EU as Catalyst: Gathering, Developing and Disseminating Intelligence and Expertise

Under the Charter for Small Enterprises, the EU has already been collecting good practice and a now substantial database is beginning to form, particularly when the 'cookbook' section of this report (chapter 4) is added in. This collection of good practices is, however, far from complete and indeed requires constant updating to maintain its contemporary nature. In addition, as we indicated at the start of chapter 4, the fact that Member States sit within the early stages of the progression model means that there is currently a paucity of good practice to inform the later stages. Such practice will need to be developed as Member States and other stakeholders find their own particular progression paths. There is therefore an important role for the EU to play in actively pushing forward developments and accelerating the pace of change. As a key catalyst, actions at EU level can be used to speed up progress in the field within Member States.

The EU thus has a critical role to play not just in gathering and collating *current* practice but in providing the mechanisms through which *new* good practice can emerge and then be disseminated to a wide audience. It should also bring this together with current research, again gathering and disseminating existing work, but also commissioning new research into areas identified as key by Member States and stakeholders through the platform function. Finally, it can draw on all these aspects to play an important role in awareness-raising with regard to the value of entrepreneurship education, and in the monitoring and evaluation of activities, helping Member States to develop effective systems for tracking progress in implementing their policies. Collectively, these intelligence-gathering activities can also inform debates amongst stakeholders (the platform function), and highlight and prioritise opportunities for activity funded through the EU (the enabler function).

The table below sets out these activities.

The EU as Catalyst: Key Activities

- Being an observatory of policy and practice. Developing frameworks for assessing and identifying good practice in entrepreneurship education, and then actively disseminating it to all interested stakeholders in order to speed up the pace of change, e.g. through hard copy and web-based formats, as well as conferences and seminars. This should in particular cover the need for practical information concerning didactic materials and teaching practice which shows how experiential learning can be effectively incorporated into the curriculum; and how teacher training can help teachers to embrace a new role of coach and moderator. Over time, strong links would be developed to Member States' own observatory functions. Good practice examples could be recognised through the introduction of an award, e.g. as part of the European Enterprise Awards, which could be an important part of awareness-raising activities.
- Acting as a research hub. This would include (a) collecting, collating, assessing and disseminating new research, for example by academic institutions; and (b) stimulating and commissioning new research, for example into teacher training, how best to embed core competences into curricula, good practice in stakeholder engagement, models of entrepreneurship education from beyond the EU, and the effect of entrepreneurship education on its intended long-term social and economic goals (the latter of which were discussed in section 2.2). Research generated by the hub will play an important role in accelerating the pace of development throughout Europe.
- Development of monitoring and evaluation frameworks, including performance indicators, to enable Member States to assess progress and measure impact. This is a particularly important area in which Member States have identified a need for support since they currently, in the main, lack effective tools by which they are able to judge the efficacy of current activities, still less those that will be developed on a more systematic scale in the coming years. As entrepreneurship education systems develop, there will be a much greater level of commitment of public resource and governments will need to be able to justify the increased expenditure.

5.3.2 The EU as Platform-builder: Networking Stakeholders and Professionals

The Panels as a process were all positively received by participants who saw real benefits in extending the networking aspects of the events at a range of levels – for example, between ministries within Member States, between clusters of Member States (through both formal and informal contacts) and at the EU level. While it is clear that some of this action should take place at the level of the Member State itself and not require intervention from the EU, there was a clear need identified to extend and deepen the engagement which had been initiated by the four Panels in order to maintain dialogue and ensure lessons and practice are shared on an on-going basis. Such networking and peer learning activity could be informed by the intelligence-gathering activities discussed in the preceding section, communicating the good practice identified to a wider audience at the 'micro level'. At the same time networking could build and deepen the knowledge base (as the Panels have done); and stakeholder

discussions could inform thinking on how best to develop EU funding streams to support entrepreneurship education as part of the EU's enabling function. Good practice lessons from elsewhere highlight the need for networking platforms to have mutually supporting physical (face-to-face) and virtual (web-based) aspects, which ultimately support the emergence of 'communities of practice'.⁷²

The table below shows the range of activities which would help establish and then develop dialogue between key stakeholders.

The EU as Platform-Builder: Key Activities

- Stimulating critical analysis and development of entrepreneurship education, through the sharing of innovation, ideas and analysis of outcomes and impacts of entrepreneurship education activity, especially between educators/practitioners in relation to experiences, didactic materials, and teaching practice. The full range of mechanisms should be used for this including seminars and workshops, and potentially the development of web-based fora that could be used regularly by stakeholders and practitioners for exchanges, Q&As etc.
- Encouraging Member State action through the dissemination of inspirational good practice, know-how, methodologies and outcome-based research.
- Building on the success of the Panel process. The Panels showed the benefits of peer learning in small group working and of grouping countries into small clusters, rather than having one event for all the Member States. They should now be extended to new audiences in other countries and to specific areas of entrepreneurship education (e.g. teacher training) and be used to continue to disseminate good practice. Participants to the Panels were enthusiastic about the possibilities of continuing this process, for example by:
 - ▶ Running a 5th Panel covering candidate and pre-accession countries in South East Europe, thereby extending the benefits of learning to candidate countries. A further extension, e.g., to the EuroMed countries, could also be envisaged.
 - ▶ Holding thematic conferences/seminars or a congress for practitioners such as was proposed at the Rome Panel, for teaching professionals (e.g. on teacher training) and/or for the business community where concrete solutions for selected problems would be developed.
 - ▶ Regular, annual or bi-annual (every 2 years) Panels for peer learning.
 - ▶ Supporting the continuation of collaboration within or between the clusters developed for the four Panels (here, consideration should be given to whether perhaps new groupings of countries should be considered to better link together countries with comparatively 'mature' entrepreneurship education systems to those that are newly developing).

⁷² See, for example, ECOTEC (2009) *Information systems to support the mobility of artists and other professionals in the culture field: a feasibility study: A final report to DG Education & Culture of the European Commission* http://ec.europa.eu/culture/key-documents/doc/cultural_mobility_final_report.pdf

The EU as Platform-Builder: Key Activities

- Mobilising and motivating the business community to become more fully engaged with the entrepreneurship education agenda through peer learning, 'show-how' activity, case studies, sector specific events and identification of 'champions' at the EU level. Engagement with the part of the business community that is strongly engaged with the corporate social responsibility agenda would also be an important part of this activity.
- Mobilising and motivating the teaching community to become more fully engaged through, for example, peer learning, dissemination of good practice in teacher training, teaching materials and by encouraging the fuller integration of entrepreneurship education into curricula.

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

It was generally recognised by Panel participants that funding for entrepreneurship education continued to be a neglected priority for national governments and one where budgets were threatened by the current recessionary situation. However, the Panels also identified a small but 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 the catalyst and platform functions 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 catalyst and platform functions, as we have noted, have the potential to provide critical inputs into such processes.

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

The EU as Enabler: Key Activities
<ul style="list-style-type: none"> • Funding the establishment of a European Centre 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 (e.g. into an EU-wide common monitoring and evaluation framework) 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 activity, for example through utilisation of the European Enterprise Awards to recognise good practice in entrepreneurship education, and by extending into entrepreneurship education the 'ambassadors' concept (as in the recently launched European Network of Female Entrepreneurship Ambassadors) to develop a network of European Ambassadors for Entrepreneurship Education which would draw upon individuals in the teaching and business worlds. • Ensuring that identified EU priorities (e.g. on key competences) are integrated into existing programmes (e.g. Youth in Action, the Lifelong Learning Programme) through calls for proposals, new initiatives, tenders • 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.

5.3.4 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).

In such a context, leadership is important. Over the years, close collaboration has been achieved between DG EAC and DG ENTR and it is recommended that they play the lead role in implementing the activities set out in this report. These two DGs will in particular have an important role to play in implementing the catalytic and platform-building activities. However, in relation to the enabling activities, other DGs also have an important role to play and there will be a need for effective coordination between them.

This is not to say, of course, that the success of the activities will depend on the two lead DGs or indeed the Commission in general. On the contrary, the ambition for entrepreneurship education expressed by Member States at the Panels can only be realised by enlarging the pool of stakeholders who are actively engaged in delivering the activities that have been set out. The active participation of stakeholders in the business and education communities is critical. This will probably require some initial stimulus on the part of the European Commission; but as the 'community of practice' develops, organic growth should then become possible, particularly as national observatories and other actions are established or developed and connected to the EU central hub over time.

Annex One: List of Participants at the Four High Level Reflection Panels

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Annex Two: Entrepreneurship Education Strategic Review

The following is the current situation with regard to national strategies for entrepreneurship education as reported for countries participating in the HLRP process:

Country	National Strategy in place?	National Strategy planned?	Comments
Austria	No	Yes	No common strategy but entrepreneurship education integrated into curricula development, teacher training and apprenticeship training.
Belgium	Yes (Flemish Community)	Yes (French Community)	-
Bulgaria	No	No	Incorporated into Lifelong Learning Strategy and National Innovation Strategy
Czech Republic	No	No	Incorporated presently into Lifelong Learning Strategy, and part of the curricular reform.
Denmark	Yes	-	From November 2009
Estonia	No	Yes	Entrepreneurship education features in Estonian Enterprise Policy 2007-2013 and Knowledge Based Estonia 2007-2013 - the Estonian R&D&Innovation Strategy
Finland	Yes	-	'Guidelines for Entrepreneurship in Education'. Entrepreneurship education incorporated into national curricula.
France	No	No	-
Germany	No	No	National impetus provided by 2008 decision by the Conference of Ministries of Education (KMK) in Germany to support entrepreneurship education in regional level government.
Hungary	No	No	Some elements of entrepreneurship education are embedded in the national core curriculum as a key competence
Iceland	No	Yes	Newly revised education policy places increased

Country	National Strategy in place?	National Strategy planned?	Comments
			emphasis on creativity, innovation and entrepreneurship. These measures will be implemented in the school system in 2011.
Ireland	No	Yes	Committed to producing a National Entrepreneurship Policy Statement, including a strong educational element -
Italy	No	No	-
Latvia	No	No	Entrepreneurship education integrated into the Education Strategy
Lithuania	Yes	-	-
Luxembourg	No	No	Entrepreneurship education embedded within Lifelong Learning Strategy
Malta	No	Yes	-
Netherlands	Yes	-	-
Norway	Yes	-	'Entrepreneurship in Education and Training – from compulsory school to higher education 2009–2014' Action Plan supports the national strategy.
Poland	No	Yes	Lifelong Learning Strategy – including an entrepreneurship education Strategy – is in preparation.
Portugal	Yes	-	Further national strategic work is in preparation as an inter ministerial initiative, as the current entrepreneurship education Strategy 'belongs' to the Ministry of Education.
Romania	No	Not known	Embedded in policies for exploiting human resource potential.
Slovenia	No	Yes	The national agency for entrepreneurship have developed a comprehensive national strategy for entrepreneurship education (2006) but this not yet been adopted by government Entrepreneurship education also incorporated into:

Country	National Strategy in place?	National Strategy planned?	Comments
			1. Slovenia Development Strategy 2. Programme of measures for promoting entrepreneurship and competitiveness 2007-2013
Spain	No	Yes	Driven forward at regional level by state governments and currently included in national basic education legislation.
Sweden	Yes	-	-
United Kingdom	Yes	-	Integrated into cross government Enterprise Strategy "Enterprise: unlocking the UK's talent" (2008) In England, National Strategy for Enterprise Education (2004) – applies to KS4 only. In Northern Ireland, 'Entrepreneurship and Education Action Plan' (2003) In Scotland, 'Determined to Succeed' (2003) In Wales, Youth Enterprise and Entrepreneurship Strategy

Annex Three: EU-wide Support for Entrepreneurial Education

ENTREPRENEURSHIP EDUCATION INTERVENTIONS - INTERNATIONAL SOURCES OF SUPPORT

POTENTIAL SOURCE OF SUPPORT	PROGRAMME	OBJECTIVES
EUROPEAN COMMISSION (DG Enterprise and Industry)	"Entrepreneurial culture of young people and entrepreneurship education" (call for proposals April 2009)	Establishing a cross-European workshop programme for entrepreneurship professors; Creating a common on-line platform for entrepreneurship educators; Creating a European Entrepreneurship Educators Network; Fostering entrepreneurship among female university graduates; Fostering the entrepreneurial mindsets of young people outside the educational environment; Developing innovative and practice-based teaching material for higher education.
EUROPEAN COMMISSION (DG Employment, Social Affairs and Equal Opportunities)	European Social Fund – Operational Programmes 2007-2013	<p>The European Social Fund, created in 1957, is the European Union's main financial instrument for investing in people. It supports employment and helps people enhance their education and skills. This improves their job prospects.</p> <p>Member States and regions devise their own ESF Operational Programmes in order to respond to the real needs 'on the ground'.</p> <p>The ESF 2007-2013 priority for human capital covers all activities concerning education and training. Not only does it aim at improving the quality and availability of education and training to help people get a job, but it also supports training as a lifelong process. The ESF supports:</p> <p>(i) The designing and introduction of reforms in education and training systems: reforms that make people more employable, that make initial and vocational training more relevant to employers' needs, and that update the skills of the educators and trainers to take account of the need for innovation</p>

POTENTIAL SOURCE OF SUPPORT	PROGRAMME	OBJECTIVES
		<p>and the knowledge based economy.</p> <p>(ii) Networking between higher education institutions, research and technology centres and enterprises.</p> <p>The Community Strategic Guidelines for the 2007-2013 programming period highlights the following specific priority:</p> <p>"promoting the quality and attractiveness of vocational education and training, including apprenticeships and entrepreneurship education" (from Education and Training in the European Social Fund 2007-2013⁷³ (DG Employment, Social Affairs & Equal Opportunities).</p> <p>Over the 2007-2013 period, the ESF is investing around €76 billion on employment enhancing projects across six specific priority areas:</p> <ul style="list-style-type: none"> - Improving human capital (34% of total funding). - Improving access to employment and sustainability (30%). - Increasing the adaptability of workers and firms, enterprises and entrepreneurs (18%). - Improving the social inclusion of less-favoured persons (14%). - Strengthening institutional capacity at national, regional and local levels (3%). - Mobilisation for reforms in the fields of employment and inclusion (1%).

⁷³ http://ec.europa.eu/employment_social/esf/docs/tp_education_en.pdf

POTENTIAL SOURCE OF SUPPORT	PROGRAMME	OBJECTIVES
EUROPEAN COMMISSION (DG Employment, Social Affairs and Equal Opportunities)	PROGRESS programme	<p>PROGRESS is the EU's employment and social solidarity programme. It was established to support financially the implementation of the objectives of the European Union in employment, social affairs and equal opportunities, as set out in the <u>Social Agenda</u>. It also contributes to the achievement of the EU 'Lisbon' Growth and Jobs Strategy.</p> <p>PROGRESS has a global budget of €743,25 million for seven years (2007-2013). The EU will use this budget to act as a catalyst for change and modernisation in five areas:</p> <ul style="list-style-type: none"> • Employment • Social inclusion and protection • Working conditions • Non-discrimination • Gender equality
EUROPEAN COMMISSION (DG Regional Policy)	European Regional Development Fund Operational Programmes 2007-2013	<p>The ERDF aims to strengthen economic and social cohesion in the European Union by correcting imbalances between its regions. In short, the ERDF finances:</p> <p>Direct aid to investments in companies (in particular SMEs) to create sustainable jobs; Infrastructures linked notably to research and innovation, telecommunications, environment, energy and transport; Financial instruments (capital risk funds, local development funds, etc.) to support regional and local development and to foster cooperation between towns and regions; Technical assistance measures.</p>
EUROPEAN COMMISSION (DG Education and Culture)	Lifelong Learning Programme (LLP)	<p>The sectorial sub programmes focus on different stages of education and training and continuing previous programmes:</p> <p>Comenius for schools; Erasmus for higher education;</p>

POTENTIAL SOURCE OF SUPPORT	PROGRAMME	OBJECTIVES
		<p>Leonardo da Vinci for vocational education and training; Grundtvig for adult education.</p> <p>The transversal programmes aim to complement the sectorial sub programmes and to ensure that they achieve the best results possible. They aim to promote European cooperation in fields covering two or more of the sub-programmes. In addition they seek to promote quality and transparency of Member States' education and training systems.</p> <p>Four key activities focus on:</p> <p>Policy cooperation and innovation; Languages; Information and communication technologies - ICT; Dissemination and exploitation of results.</p>
UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training (UNESCO-UNEVOC)	UNEVOC Network (Flagship Programme)	<p>Stimulating international and regional cooperation concerning human resource development; Promoting UNESCO normative instruments and standards; Promoting best and innovative practices in TVET; Knowledge sharing; Mobilizing expertise and resources; Strengthening partnerships with other relevant agencies.</p>

Annex Four: Statistical Review of the Incidence and Influence of Entrepreneurship Education

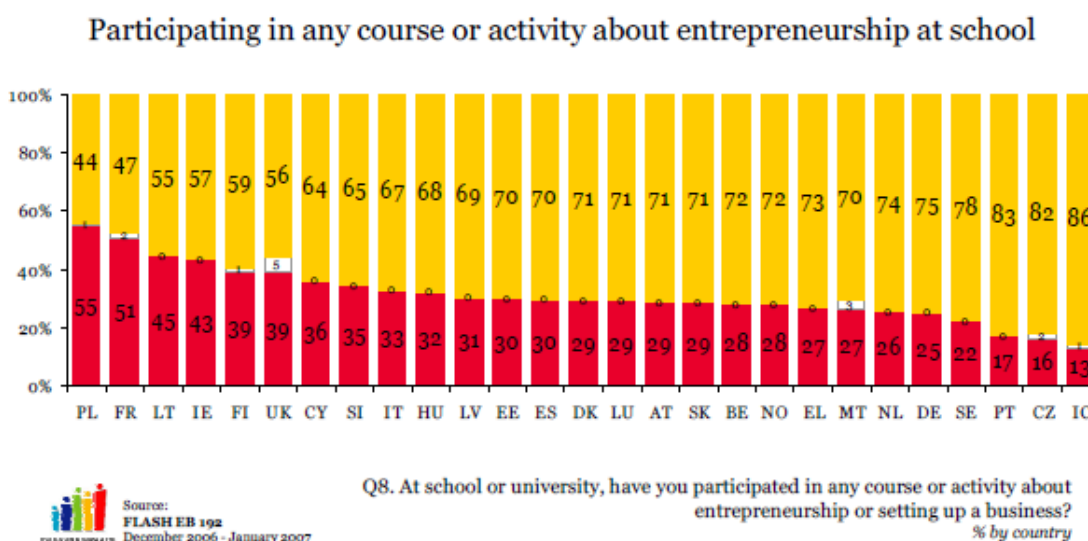
Entrepreneurship in the EU27

Evidence relating to attitudes towards entrepreneurship across the EU are drawn from the Flash Eurobarometer survey 192 “Entrepreneurship Survey of the EU (25 Member States), United States, Iceland and Norway”, (December 2006-January 2007) and the Global Entrepreneurship Monitor (GEM).

Evidence relating to incidence of business birth rates and survival rates are drawn from EUROSTAT data.

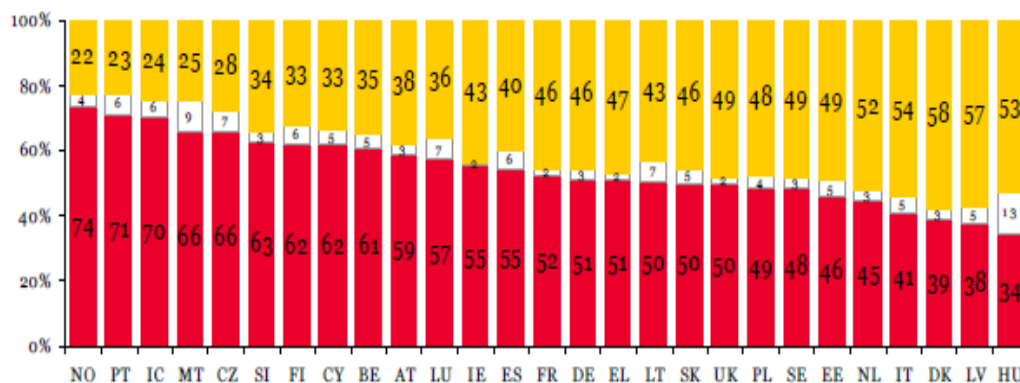
Participation in and attitudes towards entrepreneurship

Only in Poland and France did more than half of students report participating in any course or activity about entrepreneurship at school.

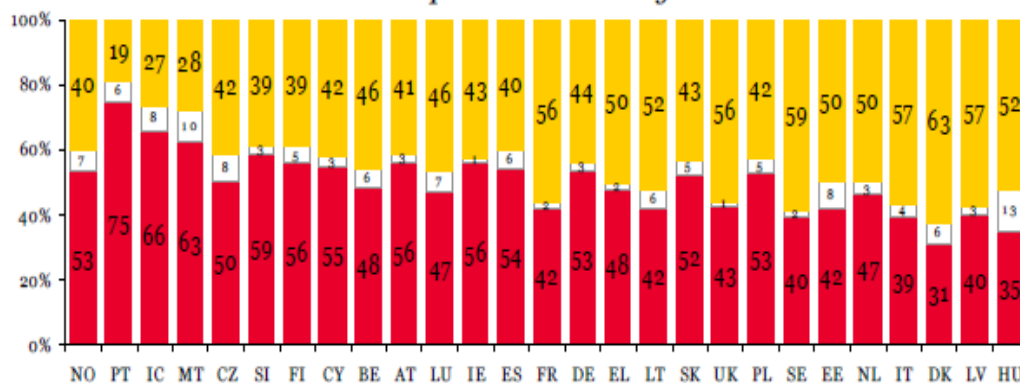


Further to this, there are varying opinions across Europe on the degree to which school education fostered a spirit of entrepreneurship and the extent to which this fostering led towards a greater understanding of the role of entrepreneurs in society and towards individuals wishing to become (business) entrepreneurs.

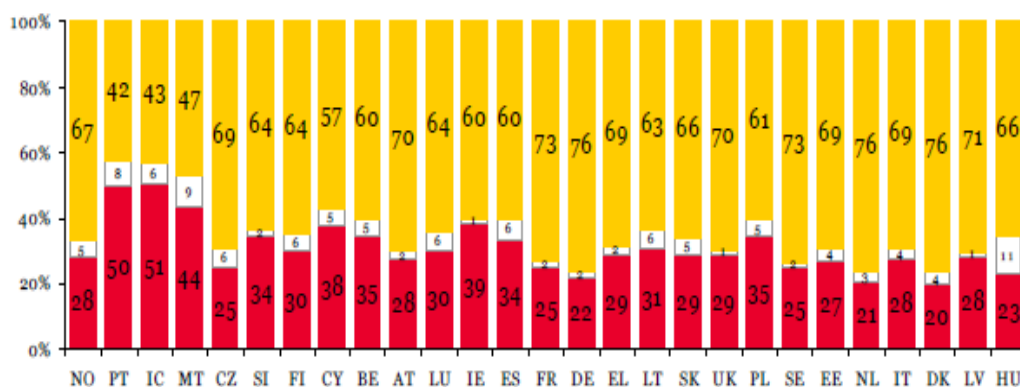
„My school education helped me to develop my sense of initiative - a sort of entrepreneurial attitude”



„My school education helped me to better understand the role of entrepreneurs in society”



„My school education made me interested to become an entrepreneur”



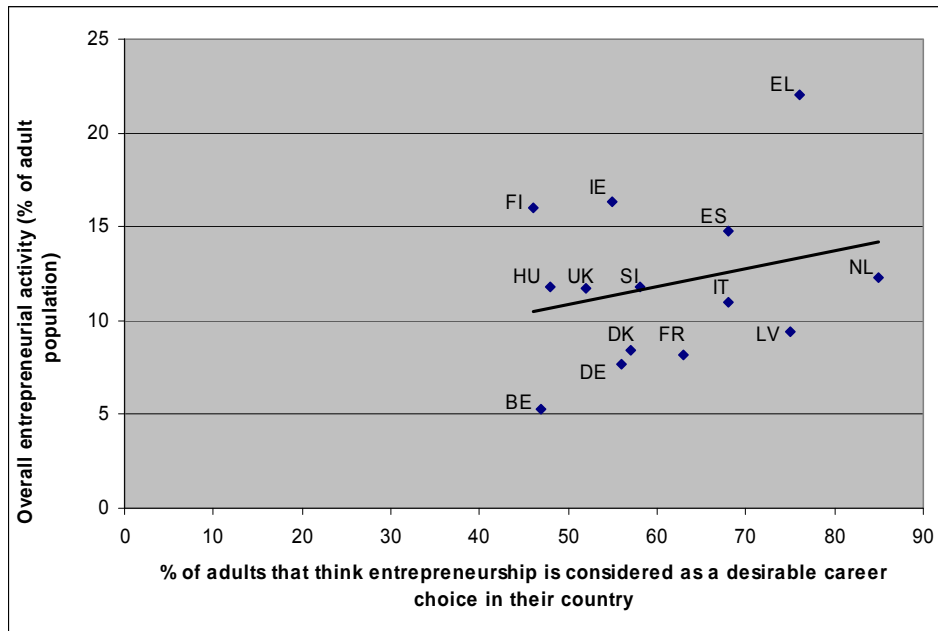
■ Strongly agree and agree □ DK/NA ■ Strongly disagree and disagree



Source:
FLASH EB 192
December 2006 - January 2007

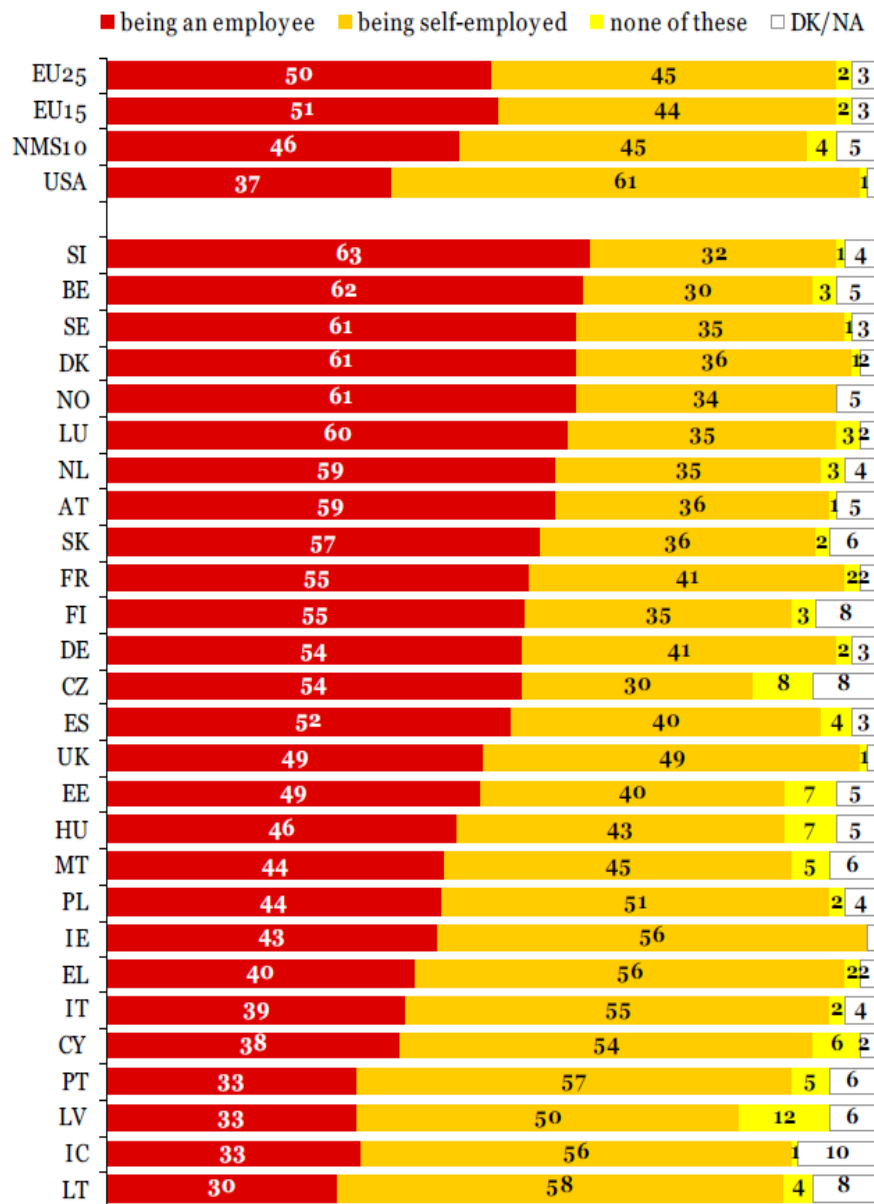
Q9. I will read you a list of statements. Please tell me, do you strongly agree, agree, disagree or strongly disagree with the following statements?
% by country

The Global Entrepreneurship Monitor (GEM) contains data on attitudes to entrepreneurship in a number of countries, including a selection of EU27 countries. These simple scatter plots suggest that there appears to be some association between positive attitudes towards entrepreneurship and actual incidence of entrepreneurial activity within countries.



Out of all EU countries, Lithuania has the highest percentage of people who would prefer to be self-employed (58%) while people in Belgium and the Czech Republic are least likely to want to be self-employed (30%). However, preference for self-employment is higher in the US than any EU country.

The choice of status: self-employed or employee

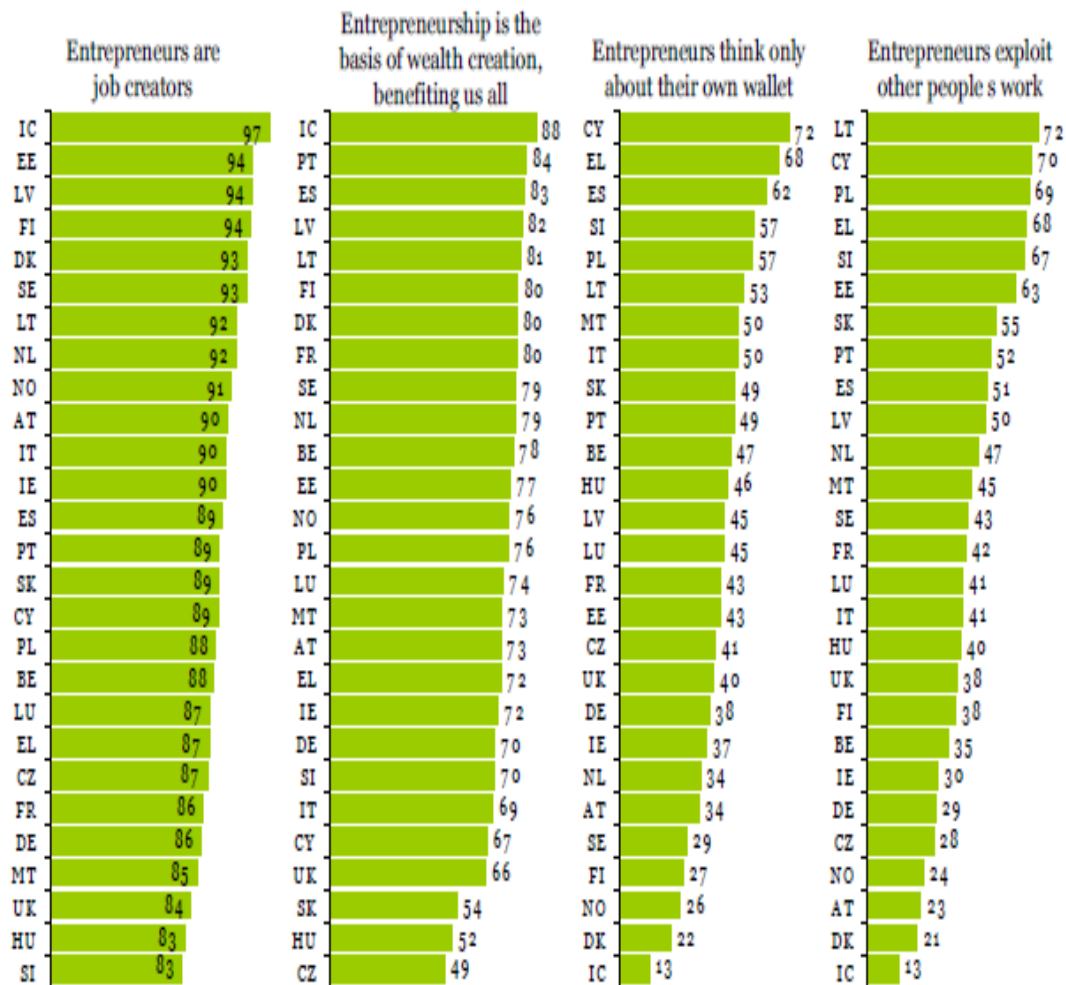


Source:
FLASH EB 192
December 2006 - January 2007

Q1. Suppose you could choose between different kinds of jobs, which one would you prefer...
% by country

Most people in Europe see entrepreneurs as job creators and, to a lesser extent, wealth creators. In some countries (e.g. Cyprus), however, there is a high degree of negative opinion about entrepreneurs.

Image of entrepreneurs in individual countries, % agree

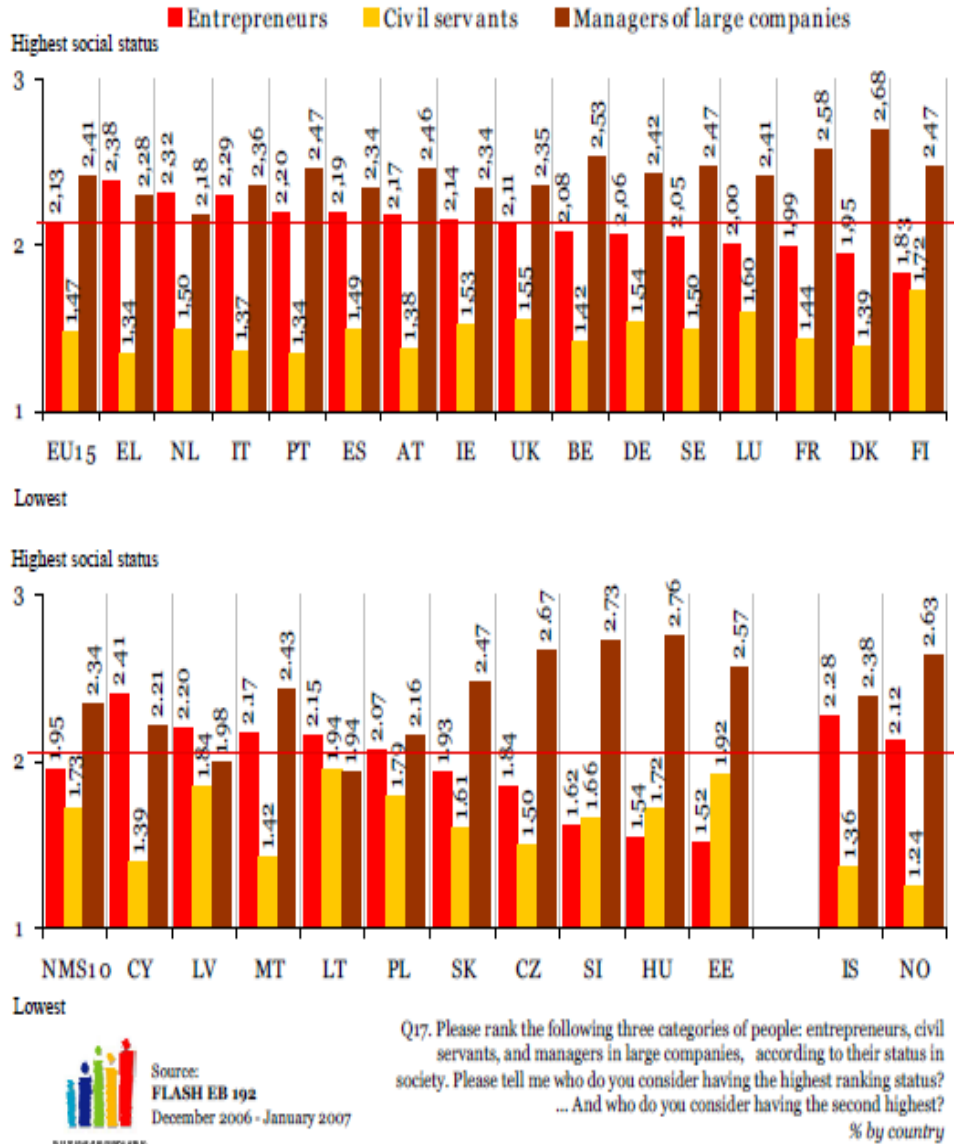


Source:
FLASH EB 192
December 2006 - January 2007

Q10. I am going to read you another list of statements. Please tell me, do you agree or disagree with them?
% by country

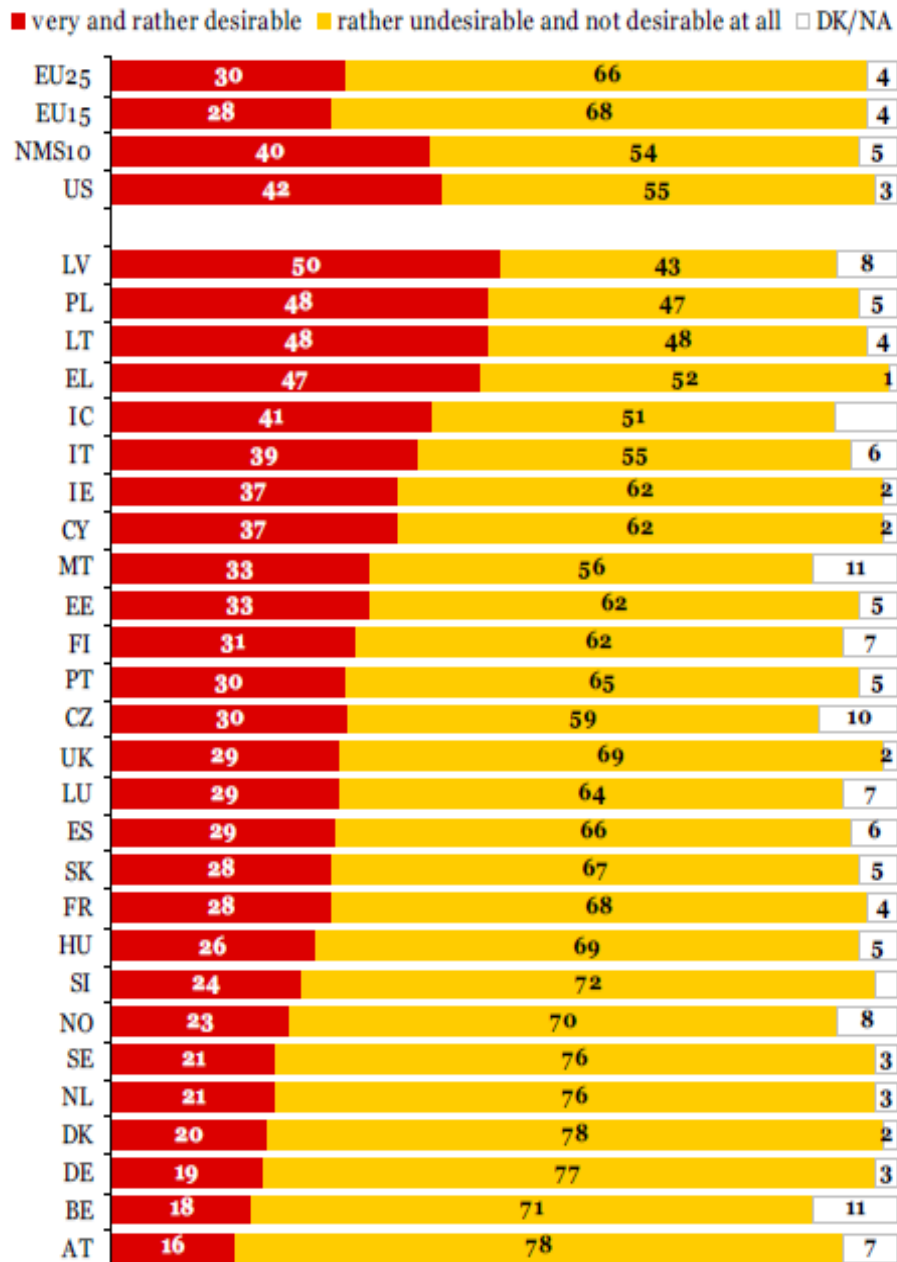
In most countries, entrepreneurs are considered higher status than civil servants (Slovenia, Hungary and Estonia are the exceptions) but only in Greece, Netherlands, Cyprus, Latvia and Lithuania are entrepreneurs considered higher status than managers of large companies.

Image of entrepreneurs in EU, Norway and Iceland, according to their status in society (mean of rankings, 4 - averages)



The percentage of people who desire to be self-employed in the next five years varies from 50% in Latvia to 16% in Austria.

The desire to become self-employed

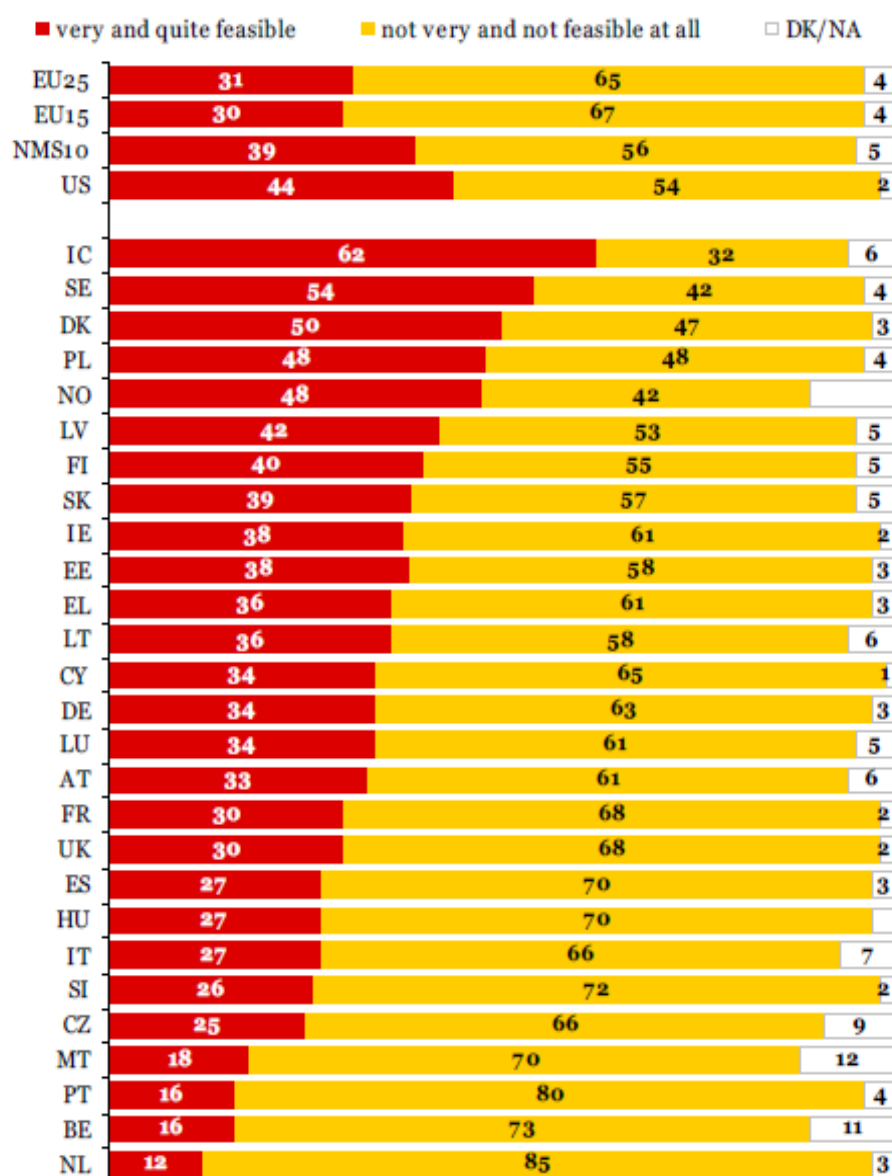


Source:
FLASH EB 192
December 2006 - January 2007

Q5. Personally, how desirable is it for you to become self-employed within the next 5 years?
% by country

Within the EU, the feasibility of being self-employed varies from 54% of people thinking it feasible in Sweden to just 12% thinking it feasible in the Netherlands.

The degree of feasibility of becoming self-employed



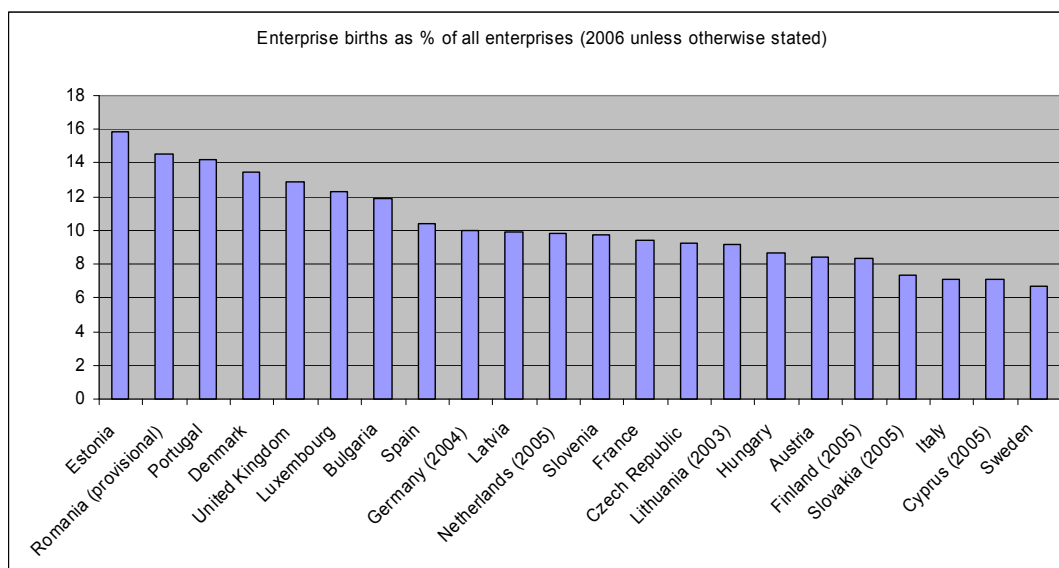
Source:
FLASH EB 192
December 2006 - January 2007

Q6. Regardless of whether or not you would like to become self-employed, would it be feasible for you to be self-employed within the next 5 years?
% by country

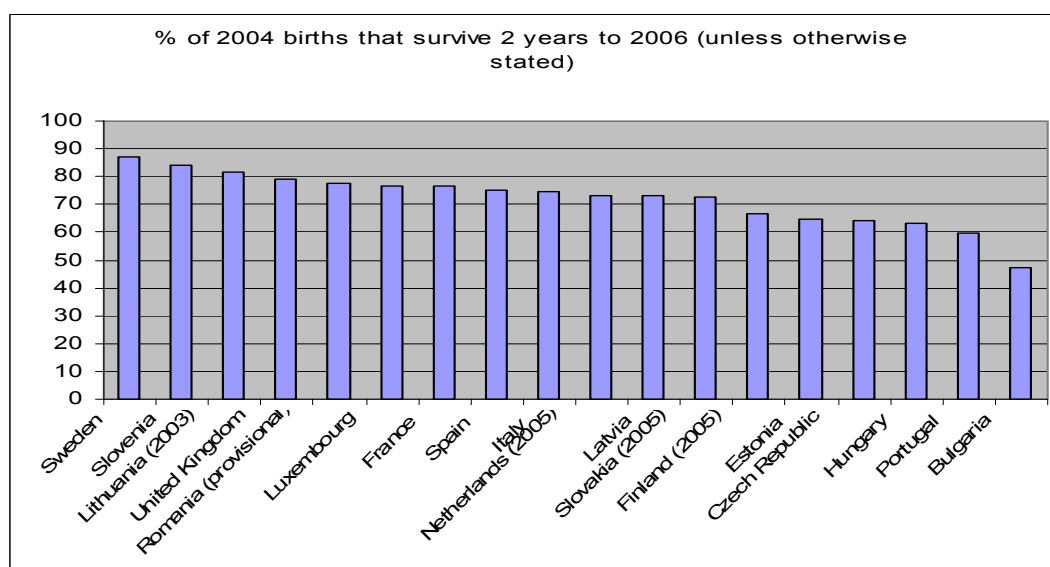
Business birth and survival rates

Volume of new businesses

According to Eurostat, the business “birth rate” (number of new businesses per year as a proportion of all businesses) ranges from 16% in Estonia to 7% in Sweden.



Although the volume of “births” is relatively low in Sweden, the survival rate is very high. In Sweden, 87% of new businesses survive for at least two years. The lowest survival rate is 47% in Bulgaria.



Annex Five: The High Level Reflection Panel Process – Delegate Feedback

The High Level Reflection Panel Process – delegate feedback

The following information was collected from delegates by way of a questionnaire distributed at the end of each HLRP event.

How useful was the HLRP event?

The majority of delegates found the events very useful in relation to expanding and developing their own networks, meeting counterparts from neighbouring countries, learning more about the European dimension of entrepreneurship education and providing stimulus to their own efforts with regard to promoting entrepreneurship education in their countries – a strong example of the last point was in the Czech Republic where the HLRP was one of the very last high profile events of the Czech Presidency and consequently was used by the host authorities to promote the concept and encourage government action in the field of entrepreneurship education.

The grouping of countries by 'region' was highlighted by a number of delegates as a useful way of bringing Member States together (minimizing travel, maximizing opportunity for future cooperation).

The main criticism was that the event was indeed too short and did not allow sufficient time for effective networking. However, even those countries which did not find it a wholly useful learning experience (e.g. Norway, because they are already so well advanced in entrepreneurship education implementation), still found it an inspirational platform for debating and networking.

How did the HLRP help develop delegates' knowledge base?

Delegates came with a huge variation in knowledge on the subject, from the theoretical through to the practical implementation of the agenda, and across levels of education from primary to tertiary and vocational. Most respondents responded positively finding the HLRP a positive learning experience, particularly with regard to:

- Improving understanding of the overall purpose of entrepreneurship education.
- Understanding the role of other stakeholders beyond (core) ministries.
- Enhancing their knowledge of the range of opportunities, strategies and activities for embedding entrepreneurship education.

How could the HLRP have been improved – in terms of process and content?

'More time for networking' was the most commonly observed response to this question. Content was seen to be at a consistently – and appropriately - high standard. However, of particular concern was the need for more information concerning measurement, evaluation, assessing impact, benchmarking and stakeholder involvement.

Should the HLRP reports be disseminated?

Delegates generally thought the outputs from the HLRPs should be widely disseminated across Ministries with key responsibilities for education and economy in particular, chambers of commerce, social partners, top managers of major corporations – most thought that an emailed letter to ministries with encouragement to disseminate and links to any virtual hub where information may be accessed would be the most appropriate communication method.

Was the HLRP process an effective vehicle for taking forward thinking about Entrepreneurship Education?

Delegates were convinced that the HLRP process was a valuable and effective vehicle for driving the entrepreneurship education agenda forward at this stage of its evolution. Some delegates offered responses on the frequency of future events - with some suggesting once every two years (when real change from this initial set of events may become visible).

How could the HLRP process be developed in the future?

In particular, it was noted that the following improvements and refinements to the process could be made for future HLRP type activities:

- Incorporating awards of good practices.
- More networking opportunities.
- Higher level representation.
- Final report disseminated faster.
- Meetings with experts facilitated via these events (if continued).
- Comparison analysis of good practices to determine best practices.
- The development of a more permanent working group to continuously share and disseminate research and analyse.

Annex Six: Summary of the Conclusions of the HLRPs

Summarising the conclusions from the four High Level Reflection Panels 2009

London HLRP

The need to continue the process of developing the theoretical underpinning of entrepreneurship education within national policy

- A critical aspect of the debate is to ensure that policy/strategy and activity flowing from this ensures that the thread of Entrepreneurship Education runs throughout the education system, from primary through tertiary and encompassing vocational and adult education. For example, in the Czech Republic, entrepreneurship is regarded as a 'horizontal subject' for children of a young age which grows to be a 'vertical subject' as education levels progress. entrepreneurship education should be regarded as a lifelong learning issue.
- In developing the notion of entrepreneurship, it is important to develop and maintain a clear message that it is not only about enterprise and business, but allowing our children to develop skills for life – or core competencies - whether or not they choose to become 'business entrepreneurs'.

Embedding Entrepreneurship in national curricula and seeing delivery through from national policy to local implementation

- Strategies are required to support teachers in the transition towards becoming familiar with and accepting of the conceptual framework for entrepreneurship education. If teachers are seen to be central in delivery terms for much of what is being debated here, then attitudes need to be changed and teacher training is required, with the role of the teacher to be placed in the middle of the process of the cultural change that is being talked about.
- If entrepreneurship is to permeate throughout the education system, cross-curriculum, there are future debates to be had concerning the role of qualifications, as opposed to key competencies.
- At a national level, a commonly observed obstacle to implementation relates to the lack of real coordination between many different organisations. Some form of central coordinating body was regarded as necessary for assisting and monitoring collaboration and for making the existing activity more productive.

Growing the involvement and the role of the business community

- There is a continuing debate to be had over the role of business in Entrepreneurship Education in terms of shaping the curriculum and the way that business is engaged. This engagement may or may not be an aspect of Corporate Social Responsibility agendas, however, it is critical that business recognise the agenda is concerned with lifelong learning and core competencies and not simply to develop business leaders or entrepreneurial employees.

Taking forward the HLRP process: the need for continuing dialogue

- The HLRP provided a key opportunity for developing relationships and dialogue between ministries and across Member States. The commitments made at this Panel need to be followed through and built upon, with appropriate encouragement from the EC.
- It was considered that the intervention of the EC in this area was of great importance both in facilitating this series of HLRPs but also in driving forward the agenda (Oslo, Small Business Act etc.) at the EU level beyond these events.

Strategy and Action Plan support

- There is a need for further work to be done in defining key indicators and outputs to gauge progress. Overall, the pilot action was seen to encourage Member States within this trajectory of plan development, with the shared learning facilitated acting as a catalyst for individual Country's actions and agendas. Potential was clearly expressed for continuing and developing the networking of countries begun by the HLRP process, particularly where there was already trans-national working in place.

Nordic countries at an advanced stage of progress – moving towards implementation

- There was a recognition that this cluster of countries was at a relatively advanced stage of evolution with many strategies in place or under development. That is not to say that support is not needed –from the EC or others, rather that this support needs to be directed towards the implementation phase rather than the theoretical or strategic developmental phase.

A need to identify appropriate resources and funding

- The HLRP exposed that competing priorities for resources and funding to support the development of Entrepreneurship Education. There was little strategic thinking as to the future of funding streams that could be accessed to support the agenda – either at a national or EU level.

Identifying roles and responsibilities

- While certain Ministries at a national level should hold ultimate responsibility for developing and leading Action Plans to support Entrepreneurship Education – and it was widely acknowledged that only Departments of Education had the primary ability and position to bring about changes to the curriculum in each country - there is clearly added value in adopting a collaborative approach between Ministries where overlap exists. Much of the Entrepreneurship Education activity in Member States is being pursued on a relatively ad-hoc basis – there was a question as to the degree that structure should be injected in to this process and how this should best be achieved, if required.

Developing teacher competencies

- It was acknowledged that there was a key set of competencies that were to be developed as part of Entrepreneurship Education and that could be developed through facilitated learning. For this to be effectively implemented, teacher competencies need to be developed and sustained. Means by which this could be achieved were highlighted as, first, raising awareness of the definition and purpose of Entrepreneurship Education; secondly, the promotion of teacher training to support cross-curricula teaching of enterprise; and thirdly, the proliferation of organisational and material (teaching aids) to support teachers implementing Entrepreneurship Education in the classroom.

Guidance and support for developing curriculum content

- Should Entrepreneurship Education be formally enshrined in curricula or not? Some delegates were of the view that such structure would act to stifle the freedom of teachers to implement enterprise learning activity to suit the culture of the students and learning environment. On the other hand, there was the view that specific learning outcomes and methodological approaches need be formalised in order to

Summarising the conclusions from the four High Level Reflection Panels 2009

ensure internal consistency within Member States. The production of national guidance and frameworks for the implementation of entrepreneurship learning across different levels and on a cross-curricula basis were generally anticipated as being useful.

Future action on teacher engagement and support

- There was agreement about the importance of engaging with teachers and consulting with those who would actually deliver Entrepreneurship Education. At an individual Member State level, as well as for the EU as a whole, there was the need for discussions with the teaching community as to the role, appropriate curriculum coverage, required framework support and methodological approach for delivery. It was recommended that teacher engagement and collaboration becomes a central element of future action in the area of Entrepreneurship Education.

Growing and disseminating the research and knowledge base

- Future research in Entrepreneurship Education was required to support the development of understanding and to inform future development. There is a potential role for the EU to co-ordinate, commission and disseminate such research on a European basis, which may encourage Member States to do the same on an individual country basis. The delegates were in agreement overall that the collation and dissemination of good practice at an EU level would be useful for Member States.

Prague HLRP

Countries and regions at differing levels of progress

- Countries were seen to be at different stages in the trajectory of Entrepreneurship Education, with a number of examples given of how Ministries (or regional authorities in the case of Germany) had taken on responsibility for 'trailblazing' or early strategy development work to progress the agenda. Examples and experiences of from 'advanced' countries and regions could be usefully disseminated – for example, the experiences from Germany presented at the Prague event.

Developing understanding of Entrepreneurship Education and appreciating the context for implementation

- As with the previous HLRPs there was discussion as to the actual meaning and definition of Entrepreneurship Education. At one end of the spectrum, the purpose of intervention was aligned with business appreciation. This tended to support the inclusion of Entrepreneurship Education as supplementary, or an 'add-on' to the traditional curriculum. At the other end of the scale, Entrepreneurship Education was regarded as enabling learning across a set of key 'life' competencies relating to personal development and creativity. In this case, it was understood more as a transformative approach to teaching methods and learning environments, to be incorporated on a cross-curricula basis. There was consensus that learning outcomes would be maximised where delivery could be progressed across the whole of the curriculum. However, the importance of national level flexibility as to how this could be interpreted and expressed was deemed important to future development.

Creating entrepreneurial learning environments and assessing impact

- There was found to be merit in considering the ideal environment for entrepreneurship or indeed Entrepreneurship Education as a 'balanced ecosystem', with a need for quality and establishing the correct balance of 'inputs' required to create optimum conditions for achievement in the area of Entrepreneurship Education. There was limited evidence that national level indicators had been developed by which to measure progress and outputs/outcomes/results. There was a common appreciation that there were difficulties in framing measurement of intervention success around long-term outcomes. Assessment or evaluation of programmes was noted as being further complicated by the wide range of external influencing factors that would be restrict attributing results to the programme.

Resources and Funding

- Budget constraints were recognised as a key factor inhibiting progress in Entrepreneurship Education. Funding availability from central governments was noted as being at the mercy of political agendas and depending on the public profile of Entrepreneurship Education. The European Social Fund was highlighted by the Commission as a potential means of funding assistance which could be further explored by Member States. There was a view amongst some of the delegates that the protocol and requirements of such funding was burdensome, and a desire expressed for clarification of the ESF funding process.

Establishing roles and responsibilities between stakeholders

- There was no formally established pattern recognised as to which organisation assumed a strategic lead on national level Entrepreneurship Education. It was commonly the case that Education Ministries hold primary responsibility for overseeing national level progress in the area (which reflected their role in matters of curriculum reform and school funding allocations) whilst the contributions from other national Ministries was seen to vary. However it was noted that in most countries inter-ministerial cooperation in this area - particularly between the Ministry of Education and the Ministry of Economy - needs to be reinforced. National level stakeholder steering groups were considered as an appropriate vehicle by which engagement could be supported and furthered.

Engaging the teaching profession

- The importance of stakeholder involvement and in particular collaboration with teachers in the early stages of Entrepreneurship Education activity was emphasised as central to achieving progress in the area. Teacher training emerged as a key means by which the justification, approach and proposed methodology could be communicated to those responsible for delivering Entrepreneurship Education into the future. While some teachers may be reluctant to teach pupils how to start a company, they will not object to teaching young people how to be creative, take initiative, etc.

Developing curriculum content and support

- The creation of the ideal learning environment to support Entrepreneurship Education was regarded as primarily involving setting a context through which young people can be 'enabled' to acquire a set of key competencies to support enterprising activity. A horizontal, cross-curricular approach and a subject-specific approach are both useful.
The main focus of practical implementation of Entrepreneurship Education should be on the merging or blurring of the boundaries between the business and education world.

Summarising the conclusions from the four High Level Reflection Panels 2009

Getting the views of students, teachers and entrepreneurs

- The Panel stressed the importance of getting the views of students, teachers and entrepreneurs. Parallel sessions were held by these stakeholder groups and they were given the opportunity to report to the HLRP participants. *Inter alia*, the inputs from these groups stressed the need for:
 - Active promotion of the Entrepreneurship Education concept amongst teachers and students;
 - Development of awards as incentives (“Excellence awards” : e.g. “Most international young enterprise award”)
 - Development of learning material;
 - Encouraging students to do internships with entrepreneurs;
 - Using entrepreneurs as role models;
 - Enhancement of European-wide networking opportunities; and
 - Integration of Entrepreneurship Education within curricula.

Support of the European Commission and growing the research base

- Dissemination of good practice in the area of Entrepreneurship Education would be a useful role for the EC to perform with a view to encouraging Member States to undertake programmes of broadened and more innovative scope. Additional studies to supplement the limited research base which informs the area of Entrepreneurship Education at present would also be helpful. It was recognised that the Commission might be in an appropriate position to commission and collate national and European level research to further inform theory and practice.

Rome HLRP

Variations in National/Regional level progress

- This Panel again showed that Entrepreneurship Education is part of a national strategy or curricular reform in some countries, whilst in others, the policy area is yet to be formalised as part of a strategic pathway. Political will emerged as a key factor influencing whether policies or action plans actually come to be adopted at national level. The Commission's role in the dissemination of good practice and research findings may have the capacity to influence national level political support and is a key driver of progress in this respect.

Appreciating the context for delivery is key to understanding the variations in progress across Member States

- The cultural background of a country has a significant bearing on the focus that Entrepreneurship Education should take on, and the subsequent content and style of classroom delivery. In Portugal, for example, a pilot approach was adopted which gave latitude to schools and teachers; this voluntary approach was successful in generating support for the initiative which has now been rolled out. So whilst it is important for European Level guidelines and policy to be adopted to support the Entrepreneurship Education agenda at national level, it is important for initiatives to reflect national and regional market circumstances and characteristics. Thus, it is considered that appropriate levels of

Summarising the conclusions from the four High Level Reflection Panels 2009

flexibility should be incorporated into European policy guidelines such that local level solutions can emerge in response to specific circumstances.

Engaging with the teaching professionals

- Teacher training at the national level needs to develop on the basis of trends and culture within the teaching profession. Attention was also drawn to the importance of quality control in teaching – implicating national strategies for teacher development and retention, as well as for attracting high-calibre recruits to the profession.
- The challenge was seen in terms of achieving effective development, co-ordination and delivery of teacher training to support Entrepreneurship Education rather than actually securing the enthusiasm of the teaching profession in support of Entrepreneurship Education. It is important that future development in Entrepreneurship Education is aligned with developments in the teaching profession and educational establishments. The Commission could therefore usefully take account of research and studies undertaken in this field.

Improving stakeholder co-ordination and co-operation

- The Entrepreneurship Education policy area involves a significant number of stakeholders. In developing a national strategy it is important to include all relevant stakeholders, as well as the responsible ministries, whilst establishing clear roles for each in order to streamline the process. Furthermore, it was seen that there are benefits for one Ministry either taking ownership or leadership of the process.

Levering the involvement of businesses

- Levering business involvement in the delivery of Entrepreneurship Education at the local level can be critical to success. The Rome Panel was strongly weighted towards good practice in business involvement and integration, reflected in the positive support for the Commission to follow up the HLRP series with a practical workshop addressing such matters.
- The HLRP identified that incentives and a strategy for securing practical involvement from businesses in Entrepreneurship Education is required. The two main barriers to involvement cited related to the lack of incentives for businesses to get involved with schools and an unclear understanding amongst businesses as to how they could most usefully contribute. This highlighted that perhaps there was scope to promote the corporate social responsibility benefits, and resultant profile and publicity opportunities of working with local schools to promote entrepreneurship learning. This aside, there transpired to be a demand for some sort of guide, to provide recommendations and guidance to businesses in terms of how to go about engaging with schools. Equally, it was identified that a guide or European level compendium as to how to lever involvement from local businesses would be useful to support education stakeholders.

Summarising the conclusions from the four High Level Reflection Panels 2009

Network development to encourage communication and good practice – and a European level Observatory function

- There was a need exposed for the development of networks between practitioners/ teachers, businesses and Ministries through which resources and experiences could be shared. There was demand for such networks to exist which went beyond a particular level in order to support cross-party communication. Whilst there was not consensus about the requirement for a national level stakeholder group to be established within Member States, there was demand for the creation of an observatory style structure to collect relevant research at an international level - to collate findings, studies and good practice case studies.

Development of Cross-Curricular Approaches

- A 'paradigm shift' is necessary to support the cross-curricula implementation of Entrepreneurship Education and in this respect a period of 10-15 years was seen as a necessary time frame for change. The approach of the European Commission should therefore be to plan to support Member States for the duration of this process through the continuous provision of encouragement and advice. This on-going approach will support the gradual emergence of policy frameworks and institutional cultures to underpin the delivery in every Member State.

Annex Seven: Mapping the Landscape of Entrepreneurship Education

