



RESEARCH PAPER

No 14

Guidance supporting
Europe's aspiring
entrepreneurs

Policy and practice to harness
future potential



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future potential

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Foreword

It is widely acknowledged that new companies and entrepreneurs are important for innovation, job creation and economic development in Europe. However, traditional education and training systems in Europe have not been supportive of entrepreneurship and self-employment. As attitudes take shape at an early age, education systems should contribute more to the development of entrepreneurial skills and mindsets.

This Cedefop report indicates that, across Europe, education and training programmes in entrepreneurship have a positive impact on developing individuals' entrepreneurial qualities, raising awareness of self-employment as a career option, and creating a positive attitude towards entrepreneurial activity. Entrepreneurship should not only be considered as a means for setting up a new business, but as a general mindset that furthers innovative, entrepreneurial behaviour, which can be useful in daily life as well as in different working environments.

Information, advice and guidance should be embedded in the learning process to support the occupational choices of individuals and their acquisition of entrepreneurial skills. The report shows that the current education and training provision in VET and HE is increasingly strengthening entrepreneurial attitudes in young people. There are also successful guidance initiatives in the Member States that support the career management of entrepreneurs during business start-up.

In this setting, the professional capacity of guidance practitioners and entrepreneurship educators will have to be further developed to equip them to support learners pursuing entrepreneurial studies and those individuals considering self-employment. Even with the best possible guidance, teaching and learning opportunities available, many other factors influence individuals to take the decision to become self-employed. These include a wide range of legal, financial and business advice related instruments supporting entrepreneurial activity.

Current education/training, employment and enterprise development policies promote entrepreneurship and are setting a strategic framework in which education and training providers can better implement related programmes/activities in national, regional and local contexts. We hope that this report will inspire future policy and strategy action in the Member States, improving guidance services to support entrepreneurial activity in Europe.

Christian Lettmayr
Acting Director of Cedefop

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Executive summary

Introduction

Entrepreneurship has never been more important than it is today. The current complex and insecure economic environment requires individuals with capabilities for solving new problems through independent and responsible action (Mittelstädt and Cerri, 2008a; Volkmann et al., 2009). Qualities, such as creativity, problem-solving and a spirit of initiative, can be useful in all aspects of work and daily life (European Commission, 2004b) ⁽²⁾. Europe's competitiveness, innovation and economic growth depends on being able to produce future leaders 'with the skills, attitudes and behaviour to be entrepreneurial and to act at the same time in a socially responsible way' (Volkmann et al., 2009, p. 42).

The European Commission and Member States have been working together since the 1990s to develop an entrepreneurial education and training agenda in Europe. However, to date no studies have been undertaken on the role of guidance in supporting entrepreneurship and entrepreneurial education. This Cedefop study aims at better understanding how guidance supports entrepreneurship learning and contributes to the development of entrepreneurs' career management skills.

The aims of the study were threefold:

- to illustrate and assess the role of guidance in supporting entrepreneurship learning in initial vocational education and training (IVET) and higher education (HE);
- to examine the availability and role of enterprise start-up guidance and support for IVET and HE students;
- to analyse the availability of guidance and other support to develop career management skills of aspiring and novice entrepreneurs.

The study covered the European Union (EU) countries, plus Iceland, Liechtenstein and Norway.

⁽²⁾ Note: From here on, an abbreviation EC will be used to describe European Commission when it is referred to as a source.

Research methods

The research process comprised primary and secondary research and comparative analysis. The process started with an initial mapping exercise and literature review. The results from this initial research informed the primary research that followed: a telephone-based interview survey of entrepreneurship education experts covering the VET and HE sectors and associations representing entrepreneurs, including national and European actors, and a series of 26 good practice case studies. Finally, to validate the findings of the previous research phases an online survey was conducted and targeted at Ministry level guidance experts in the Member States: here the aim was to inform the study about the most up-to-date developments concerning guidance and entrepreneurship learning in initial vocational education and training (IVET) and in higher education institutions (HEIs).

Definition of entrepreneurship

Entrepreneurship is a multifaceted concept that manifests itself in many different ways. Various definitions are used and no single definition has been generally agreed upon (OECD, 2009b). The European Commission defines entrepreneurship as 'the mindset and process to create and develop economic activity by blending risk-taking, creativity and/or innovation with sound management, within a new or an existing organisation' (European Commission, 2003). Eurostat makes a distinction between two different types of entrepreneurs: 'self-employed persons' who do not employ anyone, and 'employers' who have at least one employee. In the context of this study, entrepreneurship is understood broadly as ranging from single projects (that might only involve the entrepreneur on a part-time basis) to major undertakings creating many job opportunities.

Background

Since the Lisbon Council in 2000, entrepreneurship has been increasingly recognised as a competence that should be valued and nurtured within an education and training context. It sits at the heart of the education and training 2020 strategic framework, which cites innovation and creativity, including entrepreneurship, as one of its strategic objectives. A sense of initiative and entrepreneurship is also one of the eight key competences for lifelong learning.

However, while there is widespread recognition of the importance of guidance in supporting lifelong learning, European policies rarely refer to the role of guidance in entrepreneurship learning or the development of entrepreneurs' career management skills.

Entrepreneurship learning, supported by guidance, has a role to play in developing entrepreneurial skills; exposure to such support can act as a catalyst to developing an entrepreneurial mindset, irrespective of whether individuals go on to become entrepreneurs. Entrepreneurship education exists within Europe, though is not necessarily available for all: it is ad hoc and comprises 'pockets of excellence' accessible by some, with no provision or support for others.

The numbers of new business start-ups in Europe has grown over the past 10-years: there are around 1.7 million more enterprises in 2009 than in 1999 (up from 28.9 million in 1999 to 30.6 million in 2009). While people become entrepreneurs through choice or necessity, the recent financial crisis has acted as a catalyst for people setting up businesses out of necessity. Fear of failure acts as a barrier to business start-up as does a perceived lack of opportunity: less than half of Europeans believe that they have the skills to become an entrepreneur.

Entrepreneurs in Europe are a diverse group, though a 'typical' entrepreneur is male and educated to upper secondary education level. Just over a quarter of entrepreneurs have a basic level of education, while a growing proportion is educated at degree level (up seven percentage points from 21% in 1999 to 28% in 2009 according to LFS data). On average, less than a third of entrepreneurs are female (30%).

The role of guidance in Initial Vocational Education and Training

Entrepreneurship learning is important in IVET as self-employment is a realistic aspiration for students: many VET students often establish their own businesses. Entrepreneurship features in the national curricula for VET, to some extent, in most European countries. Learning opportunities for VET students are delivered in formal and non-formal settings and include simulations, competitions and mini-enterprises. A key challenge for teachers and trainers is to ensure that they have the skills to understand and teach entrepreneurship as well as to promote it as a real, and realistic, career option for those interested. Ideally all young people in VET should become exposed to entrepreneurial activities during their studies, supported by professional guidance.

A growing number of IVET institutions embrace the concept that education can help influence and develop young people's entrepreneurial skills and abilities. Entrepreneurship oriented guidance processes in IVET can also play a key role in helping young people become more aware of their entrepreneurial attributes and skills and see entrepreneurship as a career path. However, across Europe there are differences in the extent to which individual schools and colleges are taking entrepreneurship forward. In some countries, guidance-based interventions are embedded in the curriculum; in others, they depend on the enthusiasm, skills and connections of individual teachers. A lack of resources to support entrepreneurship learning and guidance appears to be a significant issue.

Guidance professionals in many countries are involved in producing material on entrepreneurship, arranging work placements and visits, and are sometimes involved in the development, or implementation, of entrepreneurship education opportunities. Their involvement is typically ad-hoc, playing a supporting rather than leading role. Some guidance professionals do not cover entrepreneurship in their guidance offer. In some cases, there is a lack of policy on promoting entrepreneurship in vocational education, whereas in others its absence is tied to the lack of curricula-based career guidance for IVET students.

Although practically all countries agree that guidance as an integral element in entrepreneurship education is vital for Europe to foster future entrepreneurial activity, there is consensus among stakeholders that many guidance practitioners working in IVET institutions do not have the necessary competences or experience to support students who are interested in becoming entrepreneurs. Few training programmes seek to develop the entrepreneurial skills of guidance professionals, who could benefit from targeted training programmes. Also, the labour market knowhow of guidance counsellors needs to be further strengthened in relation to entrepreneurship.

Non-formal guidance

Non-formal guidance methods are more apparent in VET schools concerning entrepreneurship than formal guidance services. Non-formal guidance providers include entrepreneurs, experienced people from the business world, teachers, peer students and even parents.

Involving entrepreneurs in the guidance process itself is one of the most effective ways of helping students to understand what a career as an entrepreneur means. However, while examples of successful practice have been identified, too few placement and shadowing schemes target entrepreneurs specifically; instead they focus on employers in general.

Role models underpin most successful guidance-based interventions in this field. However, these are too few despite their benefits being clear. Entrepreneurs' own accounts of their career journeys inspire young people, especially those with lower levels of educational attainment, who tend to respond very positively to the presentations of entrepreneurs and their journeys. The role models themselves also gain from the experience.

Guidance building entrepreneurial foundations and skills

Guidance offered in IVET can also play a role in helping students build a foundation for entrepreneurial activity. Such guidance can help students develop a sense of initiative, confidence and a 'can-do' attitude. This type of support provides a taste of being an entrepreneur without going into 'business mechanics'. Alongside this it is crucial that teachers and guidance practitioners also inform about the various risks involved in becoming an entrepreneur to provide the students with a realistic landscape for their career orientation.

Innovation camps and a range of different mini-company approaches help students develop business mechanics; they allow students to experience how companies are actually launched and operated. Business planning/ideas competitions are often used alongside both innovation camps and mini-company programmes to motivate young people taking part in these programmes.

Private sector involvement is crucial for innovation camps and mini-companies. Their involvement is imperative in terms of providing sponsorship but also through the 'free of charge' non-formal guidance they provide. To keep entrepreneurs and private sector involved, the programmes must also remain practical and action-oriented; private sector interest tends to decline when programmes become too 'academic'.

The mini-company approach in IVET is well researched. The business start-up rates of mini-company participants are typically twice as high as those for non-participants. Studies across the world show similar results, demonstrating that the approach works regardless of the cultural or economic context.

Anecdotal evidence suggests that under-achieving students can excel in mini-company programmes, succeeding in practical assignments such as sales. Often these students make a connection between the academic curriculum and what they wish to discover about the workplace. Mini-companies help them broaden their horizons and allow them to develop skills and knowledge pertinent to the world of work.

The role of guidance in Higher Education

Until recently, entrepreneurship was not considered a 'sufficiently' academic topic to be taught in Higher Education Institutions (HEI), nor were universities considered the best source of support for individuals who want to start their own business. However, the research findings demonstrate that HEIs can offer support to students that enables them to pursue business ventures and also become more entrepreneurial in their approach to life and work more generally.

The past decade has seen an exponential rise in entrepreneurial learning opportunities in European HEIs, though coverage remains somewhat patchy. Particular issues that warrant attention include the following:

- providing access to entrepreneurship learning for all students: more than half of Europe's students in higher education have no access to entrepreneurship education, indicating that there is a massive gap to be filled;
- taking entrepreneurship learning out of business schools, promoting interdisciplinary approaches and developing entrepreneurship skills also among 'hard science', arts, social science and humanities students;
- understanding how a holistic, institutional approach to entrepreneurship learning can be established in HEIs as well as transferred to other HEIs.

Formal vs. non-formal guidance services

HEI career guidance services are more active concerning entrepreneurship than their counterparts in compulsory education and IVET. However, most HEI career centres are typically more focused on providing information to students about employment rather than self-employment. While some business support is available, guidance professionals themselves do not necessarily feel that they are well-equipped to provide this form of assistance to students.

Guidance for entrepreneurship is more commonly present in Western rather than Eastern European countries. Significant progress has occurred in the last two years in many Eastern European HEIs, though financial shortcomings remain a real problem, accentuated by the economic crisis. Some non-formal guidance activities are available in most European countries, although the range of activities and quality of support varies significantly both between and within countries. European funding has played an important part in enabling many European countries to invest more in enterprise support.

Integrating enterprise support provision with the career service offer is one way of mainstreaming entrepreneurship as a career option. The approach means that career services staff are exposed to expertise in entrepreneurship and students are informed about available enterprise support and related training.

There should be practical ways (e.g. in-service training) for guidance professionals working in the HE sector to improve know-how, skills and competences linked to entrepreneurial activity as well as to labour market information.

Successful non-formal guidance approaches include peer-to-peer methods (e.g. student entrepreneur clubs, student enterprise ambassadors and opportunities offered by new media). These type of activity rely largely on the individual students' own initiative and curiosity to learn more about entrepreneurship from, and together with, fellow students. However, these methods have made a real and immediate impact on entrepreneurial education in the HEIs that have used them.

Opportunities offered by HEIs for entrepreneurial career exploration

Group projects, case studies and assignments for entrepreneurs and small businesses are increasingly used in higher education. Such activities allow students access to the world of work; they see how their personality matches a career as an entrepreneur as the practical assignments can get them to think about their personality, and demands and rewards associated with entrepreneurship.

Internships also provide a means through which students can explore their career options, especially when placements are organised in start-up companies and are supported by pre- and post-placement evaluations. But anecdotal evidence suggests that the use of real life enterprise assignments can discourage some students from embarking on a career as an entrepreneur as they can experience the negative aspects of entrepreneurship. However, while some students may choose not to pursue entrepreneurial opportunities themselves, they can develop key competences: initiative, communication, teamwork skills, and taking responsibility for their own learning.

Dedicated enterprise programmes and activities focused on building the confidence and self-efficacy of HE students are still few and far between. Such developments are generally the 'by-product' of extra-curricular activities rather than its primary focus. There should be a move towards supporting self-directed learning which gives students the opportunity to work more autonomously on authentic problems and hands-on tasks, at the same providing them with learning aid contextualised to their project and/or assignment.

Business planning/ideas competitions and awards are an established feature of European HEIs. They help young people pursue their entrepreneurial ideas and ambitions. They also act as an effective promotional tool as they provide a

means of raising awareness of entrepreneurialism: award ceremonies are normally associated with high profile events or prizes.

Entrepreneurship degrees are primarily the domain of business schools. However, some HEIs have taken an interdisciplinary approach to entrepreneurship learning, engaging students across a range of faculties. While specialised courses offered to humanities and social science students remain rare, examples can be found of experiential entrepreneurial training embedded in the curriculum for all science, engineering, humanities and social science students.

Pre start-up support

Pre start-up support that aims to create growth companies and commercialise research, is important for HEIs. They need to deliver business support to students with advanced business ideas. Business incubators and HE entrepreneurship centres offer a range of technical, practical and financial support, alongside advice and guidance. Incubators/enterprise centres were found in most European countries.

Business advisors employed by career services can support students and graduates through the business planning process, helping them to understand the strengths and weaknesses of their business idea, find investment finance, and understand the principles of intellectual property and company formation. Few examples of HEIs were identified which provide this support in a systematic manner; those which have a unified careers service/enterprise support unit appear to have cohesive approaches.

Supporting career management of aspiring and new entrepreneurs

Career management skills (CMS) support individuals in processing educational and occupational information as well as in applying it to career-related decisions, choices and transitions. Such skills can be helpful for novice and prospective entrepreneurs to understand and appreciate their potential as an entrepreneur and to become more familiar with how entrepreneurs network, think and learn. CMS also helps individuals improve their ability to deal with change, overcome problems and become more aware of the opportunities for help, advice, grants, loans and what needs to be done to access them. Career management skills are important to new business formation, sustainability and growth.

For an individual entrepreneur, CMS can contribute to identifying the set of skills and competences needed for founding and running a company as well as mapping out the related learning goals to improve entrepreneurial capacity and to unleash business potential. There is a range of self-management and guidance strategies, tools and practices available to support the career development of aspiring and new entrepreneurs. Much of the guidance is non-formal, delivered by individuals with enterprise rather than career guidance expertise. Online based business guidance and support tools are also emerging as a resource-efficient 'instant' source of information/advice. The main issue for an aspiring and/or new entrepreneur is to become well informed about the guidance support available for developing his/her career management capacities, and to have an easy access to such services.

Successful practices

Mentoring is one of the most successful practices for improving CMS, though such practice is not widely available across Europe. Through the mentoring relationship, aspiring and new entrepreneurs are able to develop both professionally and personally. Mentors encourage novice entrepreneurs to think objectively about and learn from their own actions so they are able to change their behaviour if required or identify pertinent lessons. Mentoring allows entrepreneurs to examine their companies, or prospective companies, from a more objective standpoint, while continuing to play a role as a leader and think about its development. Mentoring is particularly useful in the transfer of knowledge about the business world and the development of entrepreneurial skills. In some cases, private companies independently provide this type of support in an ad hoc manner.

Networking also helps aspiring and new entrepreneurs to identify opportunities and understand the 'bigger picture', e.g. the workings of the economy or the opportunities and challenges facing an employer or organisation. Peer-to-peer learning opportunities provide opportunities to share experiences, discuss practical ways of solving problems and access information about training and support services.

Support and guidance for migrant entrepreneurs is being encouraged in response to political trends and social developments: migrants typically establish businesses through necessity rather than choice. Migrants require coaching and mentoring support from professionals with up-to-date institutional and administrative knowledge of the host society, rather than informal networks of personal contacts who might not have accurate information. Community based

'business incubators' help migrants who are already entrepreneurs to expand their business and bring it into the mainstream successfully.

Challenges involved with the delivery of career management skills

Funding, finding skilled mentors and longitudinal research evidence are key challenges that limit the expansion of mentoring opportunities.

The cost of guidance and advice offered by entrepreneurial mentors is a complex matter. Mentoring schemes differ in that mentors can be paid or they can offer their services free of charge. Some findings suggest that mentee commitment is better guaranteed when paying a fee for this type of service (a practice used often in the UK and Ireland) whereas others (especially the Nordic countries) advocate mentoring based on voluntary support. It is important to tap into the potential offered by business experts (on a voluntary basis or for a small fee), especially given that large numbers of successful entrepreneurs will be retiring over the next 10 years. Quality research evidence that demonstrates that mentoring represents value for money is also needed to communicate the long term value and impact of this type of activity. While all parties involved in mentoring initiatives are convinced that they are good value for money, it takes time and thorough research to demonstrate the longer-term 'effects' in monetary terms.

Online support brings potential disadvantages, rarely offering a substitute for face-to-face interaction, especially if the guidance needs of an individual are complex. Online tools cannot provide the same depth of enquiry as face-to-face interventions. As such, online business guidance and support tools should be seen as complementary to other forms of support, though their role might continue to grow in the future as young people increasingly operate 'online'.

Both European and Member State policies increasingly emphasise the importance of providing targeted and tailored entrepreneurship support and guidance to women. Courses teaching entrepreneurship skills to women and internet resources and databases of support services seem to be widely available in Europe. It seems, however, that the kind of face-to-face, customer-focused and relational support that women would prefer are rare. Many national agencies focusing on women entrepreneurs do not necessarily have sufficient regional/local ('grass-root') presence to reach out to women.

Conclusions

There has been a considerable shift across Europe in relation to entrepreneurship in recent years and there is clear evidence that education and guidance have roles to play in supporting Europe's future entrepreneurs. Assisting individuals to think creatively and embrace innovation is essential to developing the future workforce. Not everyone needs to become an entrepreneur, yet all members of society need to be more entrepreneurial. Getting people to face challenges and uncertainty in the world of work with entrepreneurial spirit will provide the European economy with independent and creative thinkers who can 'think outside of the box', respond to challenges and adapt to change.

In line with the concept of lifelong learning, entrepreneurial guidance and learning must be seen as a lifelong process of developing individuals' confidence, skills, attitudes and behaviours. This study confirms the findings of previous research: it is important to familiarise children and young people with entrepreneurial attitudes and skills as early as possible. Entrepreneurship should be integrated into the education system at primary and secondary levels as well as in higher and adult and continuing education. Guidance professionals and teachers operating in all learning contexts need to be confident in dealing with entrepreneurialism in order to provide appropriate information, advice and support.

Formal and non-formal guidance in HE and IVET

Various guidance-based approaches are being implemented in European countries to help young people consider entrepreneurship as a career option. Guidance is also increasingly being embedded in the entrepreneurship learning processes. The high level of interactivity in entrepreneurship education, and the focus on solving real-life challenges faced by companies and entrepreneurs, allows students to explore entrepreneurialism as a career option. Learners have access to a range of different guidance and learning experiences: they can see how their personality, skills and core attributes match entrepreneur profiles; and they can participate in practical assignments, exposing them to the demands and rewards associated with entrepreneurship.

Guidance for an entrepreneurial career is seen to play an even greater role in today's society. VET and HE institutions are helping young people develop entrepreneurial attitudes (e.g. creativity, flexibility and responsibility) and skills (e.g. identification of opportunities, team work, etc.). Schools, colleges and universities, therefore, need to be entrepreneurial in their approach to preparing

individuals for the future, an idea promoted by the Oslo Agenda for Entrepreneurship Education (2006).

To date, HE institutions and their formal career guidance services have been much more active than IVET establishments in supporting entrepreneurship learning, even though fewer than half of HE students are exposed to entrepreneurship learning opportunities.

While recent EU policies on VET and HE have emphasised the importance of career guidance, there appears to be a gap between formal careers guidance and the entrepreneurship agenda, possibly accounting for the lack of formal careers guidance for entrepreneurship and the array of non-formal guidance in place. Guidance provided through non-formal channels is also more widespread across Europe than formal guidance. Non-formal guidance still lacks consistency in terms of its quality and number of activities on offer across Member States.

Engaging young people in entrepreneurial activities

The research identifies a number of lessons for guidance in engaging young people in entrepreneurship learning and related activities. Awareness raising and information giving (i.e. providing printed and digital information and guidance on becoming an entrepreneur) is still the most common method of engagement for VET and HE institutions across Europe. However, while such methods are common and have an important part to play in information-dissemination, they may not necessarily be the most effective method of engaging students in entrepreneurial learning. Non-formal guidance methods, utilising the 'power of recommendation' in the form of student ambassadors and student led clubs and networks, prove very successful at informing, and thereby engaging, students in entrepreneurship learning. In some universities, up to 80% of learners have been engaged through this method.

Awareness-raising through taster sessions about entrepreneurship provide an alternative method for informing young people about entrepreneurial concepts and approaches. Guidance services have an important role to play in guiding interested young people from such familiarisation activities towards entrepreneurship education that will allow them to deepen their knowledge and develop the entrepreneurial ability to identify and capitalise on business opportunities, to launch a business and manage its growth.

Although some of the newer media methods are criticised by some, case studies indicate that social networking sites are another successful way of reaching out to the wider student population, and several universities are looking further into this form of recruitment. Some online-based guidance platforms have been created for students and aspiring entrepreneurs to assist networking, and to

provide support. However, evidence suggests that real value resides in person-to-person interaction and, while online services within VET/HE can support entrepreneurial activities, they cannot replace one-to-one support. Role models and mentors underpin most successful guidance orientated entrepreneurship programmes; students want to see, and get to know, those who have success stories to tell. The involvement of entrepreneurs themselves is critical.

Extracurricular activities can serve a dual purpose and are useful where entrepreneurship is not embedded in curricula. However, the focus should shift from extra-curricular 'add-ons' to a model of education in which entrepreneurship is embedded in the curriculum itself.

There has also been a real increase in entrepreneurial publicity campaigns and TV/radio programmes attracting mass audiences; these present ordinary people pursuing entrepreneurial goals. Despite criticism due to a lack of assessment of their methods or educational value, these activities have a significant symbolic value in fostering people's aspirations, raising awareness about entrepreneurship, showing 'ordinary' people that everyone has the potential to be an entrepreneur and also presenting lessons about entrepreneurship.

Key lessons

Business involvement in entrepreneurial initiatives at all levels has been generally patchy and unstructured. However evidence indicates that there is a growing interest from companies, entrepreneurs and business professionals in engaging in entrepreneurial ventures, moving towards the strengthening of links between education, business, research and innovation desired by the Europe 2020 Strategy. Resources need to be dedicated to identifying, and then engaging, business, especially business owners, to ensure that their involvement benefits the entrepreneurship agenda.

A key lesson generated through the dialogue between entrepreneurs and aspiring entrepreneurs is the fact that there are no linear pathways or privileged routes that must be taken to achieve one's career goals, but that pathways can be diverse and sometimes unexpected.

Many organisations outside mainstream public education have played a key role over the years in introducing and supporting the entrepreneurship agenda of VET and HE institutes. Examples include associations representing entrepreneurs and/or SMEs, or chambers of commerce; the financial investment made by some such organisations is impressive (e.g. the Nuits de l'Orientation initiative funded by the French Chambers of Commerce and Industry). The level of investment afforded can be a proxy for the importance attributed by such

organisations to activity in this field. However, such commitment is not evident uniformly across Europe. International organisations such as Ja-Ye and EuroPEN have also made significant investments and their role in the provision of entrepreneurship education has been immense.

Future challenges

It is important to recognise that it would be a significant task to create universal access to entrepreneurship education and guidance. Ensuring that teachers involved in entrepreneurship education are trained/retrained and supported to apply the experiential, hands-on approach required to deliver entrepreneurship education, and have access to guidance materials to support their work, is a major task. While most countries offer teachers some level of training on entrepreneurship, this is generally provided by external organisations and delivered on an ad-hoc basis: it is less likely to be part of a coherent, systematic approach to entrepreneurship training delivery. Looking forward, guidance professionals will also need to be equipped with information and skills about the career opportunities offered by entrepreneurship.

The role of guidance is also limited by the fact that guidance professionals currently have limited contacts with the business world and real entrepreneurs are not adequately included in the promotion of entrepreneurship as a career option in all IVET and HE institutions (though significant development has taken place). Despite a growing focus on entrepreneurship and a range of awareness-raising activities having been implemented, many students are still not always aware of entrepreneurship as a career option. Evidence indicates that many students still prefer more traditional employment positions rather than self-employment.

Significant anecdotal evidence is available to support the positive effects of guidance-related interventions discussed in this report, but empirical and longitudinal studies are less commonly available. This report has provided examples of evaluation results which are mainly linked to the results of mini-companies, mentoring initiatives and the activities of some individual universities.

Demonstrating the impact of specific entrepreneurial learning activities, as well as the impact of formal guidance related to entrepreneurship, is a key challenge. Impact assessment and evaluation work in this field is hampered by a lack of commonly accepted indicators for success. Most often, entrepreneurship-related support programmes are evaluated on the basis of academic knowledge about entrepreneurship, academic performance more generally, business formation and wealth generation, and personal values and aspirations (Volkman et al., 2009). If the guidance value is to be included, such evaluations should

investigate entrepreneurship as a broader concept, including awareness of entrepreneurship as a career option and career aspirations of young and adult learners. They should also explore broader entrepreneurial attitudes, skills and competences.

Recommendations

Policy

A key starting point is the development of a policy agenda and associated policy framework for guidance related to entrepreneurship learning, covering education and training, employment and enterprise development, which promotes:

- entrepreneurship as a career option for all, to aid diversification in the population of entrepreneurs;
- entrepreneurship as a mandatory element of the career guidance offer at all levels, for all pupils and students, in all types of education and training;
- progressive and coordinated curricula for entrepreneurship education, where basic skills are developed in primary and lower secondary education and are further developed through upper secondary, IVET and HE, which is then taken forward by individuals as they enter working life;
- training for career guidance professionals (and other education and training professionals) to ensure they are equipped to support individuals in acquiring entrepreneurial skills/competences.

As emphasised in the 2008 Council Resolution on better integrating lifelong guidance into lifelong learning strategies, entrepreneurship guidance and learning cannot operate in a vacuum: it has to be intrinsically linked to the employment and enterprise development policy agendas.

Practice

As part of this policy framework, schools, VET and HE institutions need to be encouraged to provide learning environments that develop students' entrepreneurial skills and competences and embrace entrepreneurial principles across the whole curriculum: developing initiative, confidence, self-efficacy, creativity, responsibility and determination. Measures taken to support the development of entrepreneurship skills and their application in the world of work need to be complemented by appropriate start-up support.

Appropriate media need to be used to promote entrepreneurship to students and workers interested in establishing their own businesses.

Also, guidance practitioners and education and training professionals need to ensure that individuals interested in entrepreneurship have access to credible role models and possible mentors, hence links need to be established with appropriate business people: former students, local entrepreneurs, etc. Such role models can explain the path they took to entrepreneurship, what it entailed and how their studies linked to self-employment, enabling aspiring entrepreneurs to understand the challenges they might face. Schools, authorities and project promoters should therefore seek to tap into the willingness of many experienced and/or retired entrepreneurs, to volunteer their time to act as a role model or mentor.

In the meanwhile, the types of extra-curricula activities described in this report should continue to play a key part in helping to develop entrepreneurship. Cross-disciplinary initiatives enable students to draw on the expertise of colleagues with different outlooks and skill sets and thereby help to build entrepreneurial characteristics such as teamwork and creativity.

A 'meeting of minds' that brings together academic theory on entrepreneurship and practical experience is necessary, so theory and practice become intertwined. Practical experience is crucial and allowing students time in businesses learning from entrepreneurs as well as bringing entrepreneurs into education and training institutions provides the necessary exposure to understand day-to-day business practices. Many underachieving students excel in practical, entrepreneurship-oriented activities. Work placements and internships in SMEs, and start-up companies in particular, can also be useful for stimulating interest in business formation.

In pursuing an entrepreneurial policy agenda, it is paramount that careers guidance and education and training professionals are equipped with the necessary skills and knowledge to support students. Such skills and knowledge need to underpin their day-to-day activities, so they should be built into initial and continuing training. Guidance services, including those aimed at supporting aspiring and new entrepreneurs, should be accessible to everyone. They also should take into consideration the specific barriers to entrepreneurship faced by individuals from disadvantaged backgrounds and groups currently under-represented in the entrepreneur community.

This study also reinforces the recommendations of the 2008 Council Resolution on lifelong guidance in that it emphasises the importance of equipping individuals with skills to manage their careers throughout their lives. Career management skills can help prospective and new entrepreneurs to survive and succeed in a challenging business world. Mentoring between new and experienced entrepreneurs is one of the most effective ways of equipping novice

entrepreneurs with skills and competences to manage not only their new business but also their career. Networking and peer learning and support opportunities for new entrepreneurs should also be promoted.

Research

This study suggests that more attention will have to be given in the coming years to broadening and deepening the evidence base in the area of entrepreneurship/entrepreneurship education in Europe and in the individual Member States. It also reiterates one of the key recommendations of the 2008 Council Resolution on lifelong guidance: it has demonstrated the need for closer and stronger links between policy, practice and research related to guidance. A strong evidence base is needed to support this policy agenda: such evidence is necessary to affect change and demonstrate how and why different approaches work, for whom and in which education, training or employment contexts. This study goes some way towards cataloguing the current evidence base, though it demonstrates that additional research is required to understand fully the impact of entrepreneurial learning activities and supersede anecdotal evidence. In summary, the communities of policy, research and practice seem to be facing questions of considerable significance that require more systematic analyses to move forward policies and strategies linked to entrepreneurship/entrepreneurship education. The extent to which policy-makers, academics and practitioners are currently equipped to understand their role in promoting entrepreneurship/entrepreneurship learning is an important issue that should be explored further.

CHAPTER 1

Introduction

1.1. Background: rationale, aims and objectives

Globalisation has increased pressure on economies to compete and innovate, leading to a critical need for a vibrant base of creative and innovative entrepreneurs (European Commission, 2003; McCoshan et al., 2010). As well as meeting the challenges of globalisation and taking advantage of the opportunities that arise from it, entrepreneurial people can act as an engine for growth through job and wealth creation, boosting economic growth and supporting welfare. Other challenges facing Europe today, including environmental sustainability and ageing populations, also demand innovative and entrepreneurial responses (Herrman et al., 2008). At the same time, the shift to service and knowledge-based economies has led to opportunities for new entrepreneurial initiative, particularly in the area of services (European Commission, 2003).

It has been argued that entrepreneurship has never been more important than it is today. The complex and insecure economic environment requires capabilities for solving new problems through independent and responsible action (Mittelstädt and Cerri, 2008a; Volkmann et al., 2009). Innovative and entrepreneurial people can contribute to all domains and sectors of society, possessing skills and attitudes which reach further than an ability to launch and grow new companies. Qualities, such as creativity, problem-solving and a spirit of initiative, can be useful in all aspects of work and daily life (European Commission, 2004b) ⁽³⁾. Individuals armed with entrepreneurial skills are more likely to commercialise research, create research based spin-off companies, restructure and innovate within larger companies/organisations, and seek new solutions in the public and third sector. It has been argued that Europe's competitiveness, innovation and economic growth depend on being able to produce future leaders 'with the skills, attitudes and behaviour to be entrepreneurial and to act at the same time in a socially responsible way' (Volkmann et al., 2009, p. 42).

Europe does not need only new business: there also needs to be a focus on increasing the success rate of new enterprises. One of the main reasons for the

⁽³⁾ Note: From here on, the abbreviation EC will be used to describe the European Commission when it is referred to as a source.

high failure rate of new businesses and SMEs is the lack of experience and competence of new entrepreneurs (St-Jean and Audet, 2008; Wikholm et al., 2005). The development of entrepreneurial skills and capabilities, as well as career management skills of both would-be and new entrepreneurs, is essential to business formation and the development of successful businesses in the future. Each aspiring or new entrepreneur has a unique skills base and individual strengths and weaknesses; their willingness to learn and awareness of these strengths and weaknesses and support available are crucial to their personal development and business growth.

It is thought that individuals who feel they have the confidence, skills and knowledge to start a business are more likely to do so (Martínez et al., 2010). Although some resistance remains, more and more practitioners, academics and researchers argue that entrepreneurship is a discipline and, like any discipline, it can be learned. Education, inclusive of entrepreneurship education, has a central role in shaping attitudes, skills and culture. Consequently, entrepreneurship, together with a sense of initiative, is classified today as one of eight key competences for lifelong learning, and is seen as a mindset (rather than a purely technical skill) that can be usefully applied in all working activities and in life (European Commission, 2006b).

The development of entrepreneurship education in Europe has, so far, been mainly 'bottom-up', with fairly minimal state intervention. This means that there is a significant degree of diversity in entrepreneurship education practice in Europe: between and within countries, at the level of individual providers and among teachers (McCoshan et al., 2010). One of the key reasons is that education and training systems and guidance services have traditionally focused on equipping young people with skills, knowledge and tools that enable them to identify and secure jobs, not on teaching students to set up a business and become entrepreneurs. This traditional approach to careers is no longer deemed suitable as fundamental changes take place in the world of work: there are fewer (if any) 'jobs-for-life' and work places are more dynamic with altered working patterns (e.g. occupational changes, shorter periods of employment) and rapid changes in skill requirements as economies diversify. Overall, the employment environment is less stable and more people are working at least a part of their working life as a contractor or self-employed entrepreneur. Education and training systems and guidance services must adapt to the new working environment by promoting an entrepreneurial and innovative culture, providing the necessary skills to set up and grow businesses, and increasing the awareness of entrepreneurship as a career opportunity. Guidance services aimed at both young people and adults

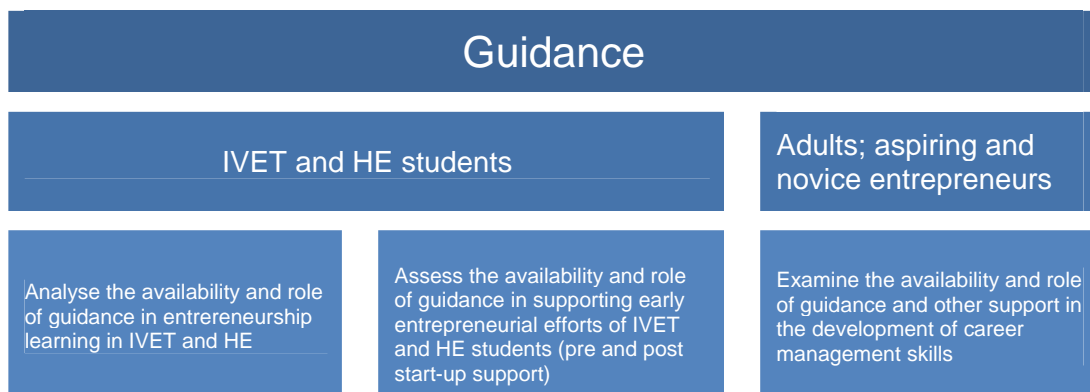
should support people in their efforts to pursue entrepreneurial opportunities available to them in their local environments.

This Cedefop study is placed in the context of increased focus on entrepreneurship and entrepreneurship education in Europe. The European Commission and Member States have been working together since the 1990s to develop the entrepreneurial education and training agenda in Europe. The European Commission (Director-General for Trade and Industry) has organised several European working groups on entrepreneurship education but no studies have been undertaken on the role of guidance in supporting the European entrepreneurship and entrepreneurial education agenda. Therefore, this study also acknowledges the wide-spread recognition of the importance of lifelong learning guidance. The 2008 Council Resolution on better integrating lifelong guidance into lifelong learning strategies states that guidance plays a decisive role in the major decisions that individuals make throughout their lives (Council of the European Union, 2008b). It can help to empower individuals to manage their own career paths within the context of their own situation and the wider labour market, providing support in creating a better balance between their personal and professional lives. The resolution identifies four priority areas, one of which is to 'encourage the lifelong acquisition of career management skills', with a focus on the key competences 'sense of initiative and entrepreneurship'.

The goal of this study is three-fold:

- to illustrate and assess the role of guidance in supporting entrepreneurship learning in initial vocational education and training (IVET) and higher education (HE);
- to examine the availability and role of enterprise start-up guidance and support for IVET and HE students;
- to analyse the availability of guidance and other support to develop the career management skills of aspiring and novice entrepreneurs.

Figure 1. **Study aims and objectives**



The study covers the European Union (EU) countries, plus Iceland, Liechtenstein and Norway.

1.2. Definitions

1.2.1. Entrepreneurship and entrepreneurs

Entrepreneurship is a multifaceted concept that manifests itself in many different ways. This means that various definitions have emerged and no single definition has been generally agreed upon (OECD, 2009b). Well known academics such as Richard Cantillon, Jean Baptiste Say, Alfred Marshall and Joseph Schumpeter have established the following definitions (OECD, 2009b, p. 8):

- entrepreneurs are those persons (business owners) who seek to generate value through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets;
- entrepreneurial activity is enterprising human action in pursuit of the generation of value through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets;
- entrepreneurship is the phenomenon associated with entrepreneurial activity.

The European Commission definition makes a particular reference to entrepreneurship as a mindset. It has defined entrepreneurship as 'the mindset and process to create and develop economic activity by blending risk-taking, creativity and/or innovation with sound management, within a new or an existing organisation' (European Commission, 2003, p. 6).

The term self-employed is often also used to describe entrepreneurs. However, Eurostat makes a distinction between two different types of entrepreneurs: 'self-employed persons' who do not employ anyone, and 'employers' who have at least one employee (⁴):

- self-employed persons not employing any employees are defined as persons who work in their own business, professional practice or farm for the purpose of earning a profit, and who employ no other persons;
- employers employing one or more employees are defined as persons who work in their own business, professional practice or farm for the purpose of earning a profit, and who employ at least one other person.

(⁴) Further information about the definitions used by Eurostat in the context of the Labour Force. Available from Internet: http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_ifs/methodology/definitions [cited 03.09.2010].

Hence, it is worth clarifying that in this study the term 'entrepreneur' refers to all individuals who have a business or businesses that take on financial risks, as opposed to working for an employer. This includes owners of businesses with or without employees. Therefore, entrepreneurship in the context of this study ranges in scale from solo projects (that might only involve the entrepreneur on a part-time basis) to major undertakings creating many job opportunities.

New entrepreneurs (also known as novice and nascent entrepreneurs) are those business owners who have recently set up a business (i.e. have had their own business for up to two years). Aspiring entrepreneurs (also known as prospective, 'wanna-be', and would-be entrepreneurs) are those who are thinking, or are in the process, of launching their own business.

1.2.2. Entrepreneurship learning

Most of the literature refers to education and training related to entrepreneurship as entrepreneurship education. For this study the term 'entrepreneurship learning' has been used to cover all entrepreneurship education and training which promotes creativity, innovation and business start-up. The term entrepreneurship education is often associated with general business or economic studies, whereas the definition of entrepreneurship learning is a broader concept which embraces learning that builds 'knowledge and skills about, or for the purpose of, entrepreneurship' (Martínez et al., 2010, p. 11). Thus, entrepreneurship learning covers, for example:

- education about being enterprising and entrepreneurial in the more general sense;
- education about entrepreneurship, including the context for and philosophy behind entrepreneurship;
- training linked to starting a business.

1.2.3. IVET and HE

Initial vocational education and training (IVET) refers to upper secondary level vocational education (ISCED 3). Higher education (HE) refers to tertiary level studies (ISCED 5 and 6); studies of both academic (universities) and vocational character (e.g. polytechnics and technical higher education institutions).

1.2.4. Career management skills

Career management skills (CMS) relate to a wider view of a person's development, to the development of 'meta-competences' that are not occupation-specific but are transferable, thus helping individuals to manage better their learning and work. The European Lifelong Guidance Policy Network

(Sultana, 2009) has proposed the following definition: 'Career management skills refer to a whole range of competences which provide structured ways for individuals and groups to gather, analyse, synthesise and organise self, educational and occupational information, as well as the skills to make and implement decisions and transitions.'

1.2.5. Guidance

In this study guidance is understood as a broad framework of support. The Council of the European Union's definition of guidance refers to services designed to assist individuals of any age to make occupational, training and educational choices and to manage their careers (Council of the European Union, 2004). It covers individual and collective activities relating to information-giving, counselling, competence assessment, support, and the teaching of decision-making and career management skills.

Guidance in the context of entrepreneurship can be provided by three groups of individuals:

- formal guidance is provided by trained career guidance counsellors and other guidance professionals. Such professionals can work at: education and training institutions; business support bodies; private organisations; public authorities, such as the public employment services (PES); chambers of commerce; and associations representing entrepreneurs;
- non-formal guidance refers to information, advice and support provided by individuals with significant support in business formation. This includes: business coaches; mentors; senior managers of companies and other experienced business professionals; experienced and successful entrepreneurs; and former (i.e. retired) entrepreneurs;
- informal guidance covers guidance and other support given by family members, colleagues and peers.

1.3. Analytical framework

Guidance is a broad framework for different support mechanisms and can be provided through formal, non-formal and informal channels. Taking into account the guidance context, the following analytical framework describes the different forms of guidance relationships and activities that have been analysed as part of this study (see Figure 2).

Figure 2. **Analytical framework**

Formal guidance
Formal guidance offered by trained guidance professionals working either in chambers of commerce, associations of entrepreneurs, PES, etc., or within education (VET and HE institutions)
Non-formal guidance
Mentoring and business coaching
Practical teaching methods, including assignments for companies or entrepreneurs, and mini and virtual companies
Online services, including interactive career assessment tests for entrepreneurs, business support tools, web platforms and virtual entrepreneur communities
Business incubators
Community based holistic interventions for hard-to-reach groups
Engagement with entrepreneurs through lectures by and meetings with successful business owners
Entrepreneurship centres
Awareness raising activities, including dedicated days, meetings, weeks and festivals on entrepreneurship, enterprise ambassadors and role models, enterprise awards and competitions and other media activities on entrepreneurship (e.g. TV and radio programmes, and professional magazines dealing with entrepreneurship)
Work placements, company visits and shadowing opportunities
Private sector interventions
Informal guidance
Networks of entrepreneurs and other peer learning opportunities

1.4. Methodology

This report is based on a three-stage research process that used secondary research, primary research and comparative analysis. The key methodological tools used included literature reviews, mapping, interviews and case studies. Two surveys were also carried out: a telephone-based interview of entrepreneurship education experts and, to validate the findings of the previous research phases, an online survey targeted at Ministry level guidance experts to inform the study about the most up-to-date developments in guidance and entrepreneurship learning in initial vocational education and training (VET) and in higher education (HE).

The research process began with a thorough review of international, European, national and regional publications which documented

entrepreneurship and entrepreneurship education in Europe. Approximately 250 publications were reviewed and examples of good practice were selected.

The primary research stage began with a survey of entrepreneurship education experts. This included a round of semi-structured telephone interviews with entrepreneurship education experts from VET and HE sectors, in addition to representatives from associations of entrepreneurs and/or chambers of commerce. A small number of European level experts and stakeholders were also interviewed. In total, 71 expert interviews were carried out and three thematic databases were created to store the interview and the literature review findings.

The findings from the literature review and sourced through the interviews were used to select examples and themes for case studies: 26 were prepared on different themes. The case studies took on different formats: some were in-depth case studies of individual projects or practices within specific IVET or HE institutes, while others were composite case studies into specific themes. In-depth case studies were prepared from 10 countries, including Belgium, Bulgaria, Finland, Ireland, France, Norway, Portugal, Spain, Sweden and the UK. The thematic case studies explored a variety of issues:

- the guidance value of the mini-company approach;
- guidance for women and migrant entrepreneurs;
- the role of PES in supporting entrepreneurship;
- business idea/plan competitions;
- entrepreneurial awareness-raising activities;
- online career assessment tests for aspiring and novice entrepreneurs;
- business incubators;
- the capacity of VET teachers to deliver entrepreneurship learning.

The composite case studies include shorter project and practice descriptions from most of the study countries and a special case study of the European wide entrepreneurship programme, Erasmus for young entrepreneurs, was also undertaken.

To investigate the views of policy-makers and practitioners with a guidance remit, an online survey was launched on IVET and HE. The members of the European Lifelong Guidance Policy Network ⁽⁵⁾ (ELGPN) and the

⁽⁵⁾ The European Lifelong Guidance Policy Network aims to assist the EU Member States and the Commission in moving European cooperation on lifelong guidance forward in both the education and the employment sectors. The ELGPN was established by the Member States and the Commission is supporting the activities of the network in 2007-2010 under the Lifelong learning programme. Available from Internet: <http://ktl.jyu.fi/ktl/elgpn> [cited 30.9.2010].

Euroguidance ⁽⁶⁾ network were invited to participate. An email inviting members to respond to the survey was sent to 112 ELGPN and 66 Euroguidance network members. The survey was online for four weeks and had a total response of 43. The goal of the online survey was to validate the findings of other research phases (interviews and literature review).

The final stage of the study concentrated on the analysis of the findings from the earlier stages of the project. This report presents a comparative overview of the findings.

⁽⁶⁾ The Euroguidance network is a network of centres linking together the careers guidance systems in Europe. The network promotes mobility, helping guidance counsellors and individuals to understand better the opportunities available to European citizens throughout Europe. Available from Internet: <http://www.euroguidance.net/> [cited 30.9.2010].

CHAPTER 2

Background

The purpose of this background section is sixfold. This chapter aims to provide information on:

- the EU policy context for entrepreneurship education and guidance in Europe;
- entrepreneurship in Europe, in terms of the number and profile of entrepreneurs;
- entrepreneurial aspirations and the status of entrepreneurship as a career option;
- entrepreneurial skills of Europeans, in particular their preparedness to pursue entrepreneurial activities;
- entrepreneurship learning in Europe, especially within IVET and HE;
- a summary of the key issues and the way in which they are linked to the guidance context.

2.1. Policy context

As a response to the pressures on economies to compete and innovate, over the last few years policy agendas at different levels have recognised the need to develop a strong base of new and innovative entrepreneurs. There has indeed been growing recognition in the EU policy agenda of the importance of entrepreneurship and entrepreneurship education. This is apparent in both economic and employment policies, as well as from education and training policy developments. EU level guidance policies are also starting to acknowledge the importance of guidance for entrepreneurship, although the direct link between guidance and entrepreneurship remains weak, in some case non-existent, in most European countries.

2.1.1. EU policy linkages to entrepreneurship learning

The first EU level developments related to entrepreneurship learning date back to 1997 and the BEST Task Force comprising entrepreneurs, public administrators and academics. It identified education for the creation and promotion of an entrepreneurial spirit as one of the key recommendations (Rodríguez, 2009).

In 2000, the Lisbon European Council identified entrepreneurship as one of the five areas of 'new basic skills' for the knowledge-based economy (European

Council, 2000). The Lisbon conclusions underlined that entrepreneurship is a competence that society as a whole should value and that a spirit of enterprise is required. Education should provide opportunities to acquire skills needed to set up and run a business.

Since the Lisbon Strategy there has been a constant increase in the number of references to entrepreneurship and entrepreneurship education in Commission communications. As an example, the European Charter for Small Enterprises was adopted in 2000 within the context of the Lisbon Strategy. It commits Member States to 'nurture entrepreneurial spirit and new skills from an earlier age'. It recognises 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 (European Commission, 2000).

In 2004 the Commission published an EU action plan on entrepreneurship that stated that entrepreneurship is 'a major driver of innovation, competitiveness and growth' (European Commission, 2004a). The action plan sets out five strategic policy areas, two of which are directly related to this study: fuelling entrepreneurial mindsets and encouraging more people to become entrepreneurs, particularly women and people from ethnic minorities. It highlights the need for individuals to match their interests, skills and personal situation with the right entrepreneurial activity, such as part-time, cooperative ventures or expansion-driven. Entrepreneurship education is seen as a key element in developing entrepreneurial skills and encouraging young people and adults to become entrepreneurs.

The European Commission communication on 'fostering entrepreneurial mindsets through education and learning' noted that formal education in Europe has not generally supported entrepreneurship and self-employment. It identified the need for cooperation between different ministries, particularly those responsible for education and enterprise, and relevant stakeholders from the business world, in order to develop and implement effective entrepreneurship education (European Commission, 2006b). Education systems can have an important impact on the success of entrepreneurship in the EU, as individuals are shaped by attitudes and cultural references at an early age. Education can contribute to encouraging entrepreneurship, by fostering the right mindset, by raising awareness of career opportunities as an entrepreneur or a self-employed person, and by providing the relevant business skills (European Commission, 2004b). By promoting entrepreneurship throughout the education system, young people will be encouraged to see that entrepreneurial activities and self-

employment can lead to success and that they can start-up their own business venture if they wish.

The Oslo agenda for entrepreneurship education sought to promote entrepreneurial mindsets in society through education and learning, in particular by fostering entrepreneurial mindsets of young people through education at all levels, from primary school to university. It is a detailed catalogue of actions that national policy-makers can choose from and adapt to their particular circumstances (European Commission, 2006b and 2006c). As part of its activities, a European conference on entrepreneurship education was held in Oslo in October 2006 to exchange experiences and good practices, and to discuss how to move forward in promoting entrepreneurship education more systematically, based on concrete evidence and recommendations.

The 'Think small first' principle of the Small Business Act for Europe (European Commission, 2008b) recommends that entrepreneurship is introduced as a key competence in school curricula, that entrepreneurship is part of teacher training and that cooperation between education and businesses and non-profit organisations is increased to bring in content and practice from business life.

The economic crisis and the resulting high levels of unemployment across Europe have further emphasised the need for sustainable job creation and for increased EU competitiveness in the face of strong international competition for jobs and markets. The European Economic Recovery Plan 2008 highlights the need to encourage entrepreneurship as a way of supporting economic growth and promoting active inclusion by reintegrating unemployed workers back into the labour market (European Commission, 2008b). The recent EU communication on a shared commitment for employment (European Commission, 2009a) also promotes entrepreneurship education as a key aspect in supporting unemployed individuals and young people to set up their own business or micro-enterprise.

The 2009 Council Conclusions on a strategic framework for European cooperation in education and training ('ET 2020') quote 'enhancing creativity and innovation, including entrepreneurship, at all levels of education and training' as one of its key strategic objectives (Council of the European Union, 2009). The framework states that innovation and creativity are critical for enterprise development and the EU's international competitiveness. Moreover, partnership between the world of enterprise and different levels and sectors of education, training and research can help to ensure better focus on the skills and competences required in the labour market and on fostering innovation and entrepreneurship in all forms of learning.

Consequently, the European Commission has included a 'sense of initiative and entrepreneurship' in a new framework of eight key competences for lifelong learning (Council of the European Union, 2009). In common with the other transversal key competences, this is strongly process-orientated. It refers to an individual's ability to turn ideas into action and the ability to plan and manage projects to achieve objectives which may be social as well as commercial. This competence is also underpinned by a varied body of knowledge which is open to a range of interpretation: understanding the workings of the economy, as well as the specific demands and opportunities of employers. This approach reflects the ethics of business and the potential of enterprises to be a force for good, for example through fair trade or through social enterprise. Personal and interpersonal skills are also part of this competence, including the ability to lead and delegate, analyse, communicate, debrief, evaluate and record, effective representation and negotiation, and the ability to work both as an individual and collaboratively in teams.

The medium term forecast for skills supply and demand in Europe (up to 2020) suggests that transversal competences such as entrepreneurship are important for helping people to adapt more quickly to structural changes and ensure they are fit for occupational mobility (Cedefop, 2010). The Commission (European Commission, 2010d) intends to examine the possibility to step up the promotion of entrepreneurship mobility for young people, in particular by increasing Erasmus work placement mobility, promoting entrepreneurship education in all levels of the education system, enhancing business participation in Marie Curie actions, and by supporting the Erasmus for young entrepreneurs initiative.

Recent policies on VET and HE also acknowledge the role of education for entrepreneurship. The Commission's Communication on European cooperation in vocational education and training states that 'education for entrepreneurship ... should be encouraged and accessible to all VET students, across all curricula and fields of study' (European Commission, 2010c, p. 10). The Bruges Communiqué (2010) addresses the importance of promoting entrepreneurship in IVET and CVET in close cooperation with employers, VET providers and national business support services, and highlights the need to encourage business start-ups for VET graduates as well as promoting learning mobility for young entrepreneurs. In relation to HE, the modernisation agenda for universities stresses the importance of improving the career prospects of researchers at all stages of their career by adding entrepreneurial skills to scientific expertise. It also urges universities to develop entrepreneurial, management and innovation skills and make sure they become an integral part of graduate education,

research training and lifelong learning strategies for university staff (European Commission, 2006b).

Finally, the Europe 2020 Strategy outlines the Commission's commitment to strengthening links between education, business, research and innovation. It also urges Member States to focus school curricula on creativity, innovation, and entrepreneurship (European Commission, 2010b).

2.1.2. EU policy linked to guidance and entrepreneurship

An important part of supporting 'a sense of initiative and entrepreneurship' (Key competences for lifelong learning) is ensuring entrepreneurship education teaches young people and other individuals skills that allow them to manage their careers, identify their strengths and weaknesses and know where to obtain career and business information. It is increasingly recognised that to foster sustainable entrepreneurship, there must be greater provision of guidance and advice in entrepreneurship education and in the career management and development of entrepreneurs and the self-employed. Starting up an own business can be a daunting prospect for an individual and access to even the most basic guidance and support (such as help in finding out where to go to get advice on venture capital) can make a significant difference to an individual's self-confidence and motivation.

Despite widespread recognition of the importance of guidance throughout life and lifelong learning, European policies rarely refer to the role that lifelong guidance can play in entrepreneurship learning or in the development of career management skills of entrepreneurs in the EU. For example the 2004 Council resolution on strengthening policies, systems and practices in the field of guidance throughout life in Europe (Council of the European Union, 2004) does not mention entrepreneurship at all.

One of the exceptions is the 2008 Council Resolution on better integrating lifelong guidance into lifelong learning strategies, which states that guidance plays a decisive role in the major decisions that individuals take throughout their lives (Council of the European Union, 2008b). This can help to empower individuals to manage their own career paths within the context of their own personal situation and the labour market, as well as support them in achieving a better balance between their personal and professional lives. The resolution identifies four priority areas, one of which is to 'encourage the lifelong acquisition of career management skills', which includes the key competences 'sense of initiative' and 'entrepreneurship'.

The International Labour Organisation, as part of its 2004 Recommendation concerning human resources development: education, training and lifelong

learning, suggested that members should 'provide information and guidance on entrepreneurship, promote entrepreneurial skills, and raise awareness among educators and trainers of the important role of enterprises, among others, in creating growth and decent jobs' (International Labour Organisation, 2004). The expert group report on New skills for new jobs (European Commission, 2010e) stresses the guidance provider role of the public employment services also in terms of designing their training schemes and services in order to stimulate entrepreneurship and self-employment.

Recent EU policies on VET and HE emphasise the importance of career guidance, but do not usually link it to the entrepreneurship agenda. For example, in 2006 the Council Conclusions on the future priorities for enhanced European cooperation in VET reiterated the need for 'improved guidance throughout life to take better account of the opportunities and requirements of VET and of working life, including increased career guidance and advice in schools and for families, in order to ensure informed choice' (Council of the European Union, 2006); it did not explicitly refer to the need for more career guidance for entrepreneurship. Similarly, there was no special mention of entrepreneurship guidance in the 2009 Communiqué of the Conference on the Bologna Process 2020, where the Ministers responsible for higher education in the 46 countries of the Bologna Process declared that 'higher education institutions, together with governments, government agencies and employers, shall improve the provision, accessibility and quality of their careers and employment related guidance services to students and alumni' (European Ministers Responsible for Higher Education, 2009).

2.2. Entrepreneurship in Europe

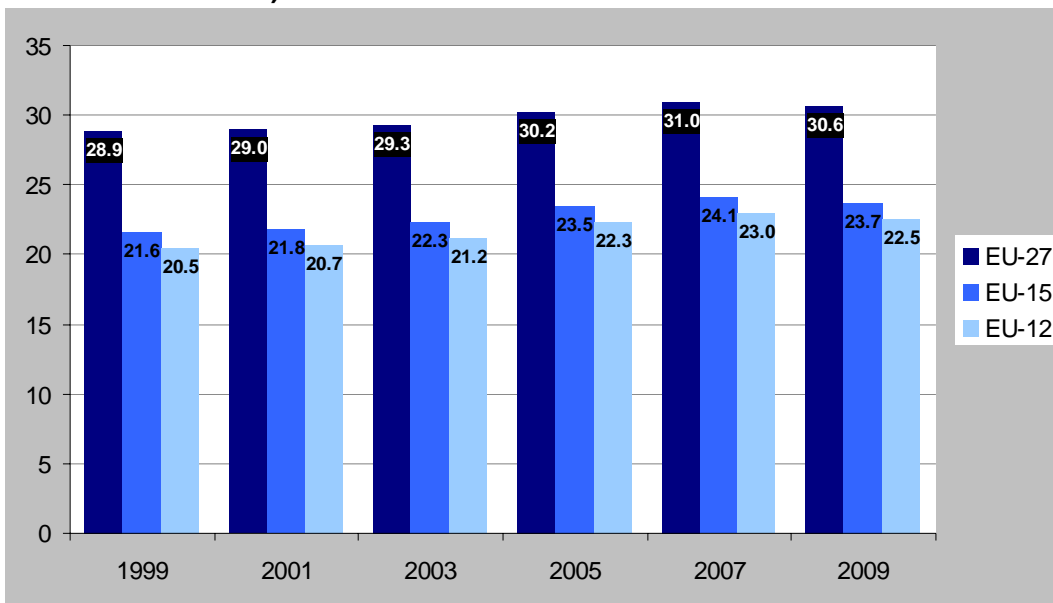
It is important to examine entrepreneurial activity in Europe to understand differences between countries and groups of individuals which are more or less likely to pursue an entrepreneurial career. This is particularly important as, for a long time, Europe has been far behind the US in entrepreneurial activity (European Commission, 2003; European Commission, 2004a; Volkmann et al., 2010).

2.2.1. Entrepreneurial activity in Europe

Many people have the ambition of setting up and running their own business and today more people than ever have decided to do so. There are many Europeans who wish to grasp the opportunity (and risk) of working for themselves and to

enjoy the benefits derived from being their own boss. According to Eurostat (2010), there were over 30 million entrepreneurs in the European Union in 2009, which represents an increase of nearly two million since 1999 (see Figure 3). Italy has the highest number of entrepreneurs in Europe (5 million), followed by Germany (4 million) and the UK (3.6 million).

Figure 3. **Number of entrepreneurs across the EU-27 (figures indicated in millions)**



Source: Eurostat, 2010.

Includes statistics for: a) Self-employed persons not employing any employees are defined as persons who work in their own business, professional practice or farm for the purpose of earning a profit, and who employ no other persons; and b) Employers employing one or more employees are defined as persons who work in their own business, professional practice or farm for the purpose of earning a profit, and who employ at least one other person.

However, not all entrepreneurs become entrepreneurs out of choice. Many are not the type who wishes to capitalise on an opportunity, but instead, they have become entrepreneurs out of necessity. Though European countries have low levels of necessity driven entrepreneurship in comparison to countries in Africa and Asia, the recent financial crisis has prompted an increase in necessity-driven entrepreneurial activity. In 2009, the share of necessity, as opposed to opportunity driven entrepreneurs ranged between 7% and 32% across Europe (Bosma and Levie, 2009) and a year later the figures for necessity driven

entrepreneurship were 7% and 31% (Kelley et al., 2010) ⁽⁷⁾. Out of the 15 (2009) and 16 (2010) countries surveyed, Latvia (2009) and Ireland (2010) record the highest percent of necessity driven entrepreneurship in Europe, with 32% and 31% of all new entrepreneurs having set up their company out of need. The lowest share of necessity driven entrepreneurs in 2010 can be found in Iceland (7%), Denmark and the Netherlands both with 8%.

As indicated in Figure 3, there was a 6% increase in the number of entrepreneurs across Europe between 1999 and 2009. The most significant change occurred in Slovakia where there was a 133% increase over the 10-year period compared to a reduction in Lithuania of 39% (see Table 1). With the exception of the Czech Republic and Slovakia, there was a general reduction in Eastern European countries. Most Western European countries have seen a clear growth in the number of entrepreneurs, with the Netherlands leading the way with a 35% increase.

Table 1. **Change in number of entrepreneurs between 1999 and 2009 across Europe**

	Countries (% change between 1999 and 2009)
Decline (negative growth of more than 2%)	LT (-39%), IS (-26%), HU (-20%), PT (-12%), RO (-10%), PL (-10%), BU (-9%), LV (-8%), SI (-4%)
Stable (growth of +/-2%)	EE (1%), BE (2%), SE (2%)
Incline (growth of over 2%)	FI (4%), DK (4%), EL (5%), IT (6%), ES (8%), LU (9%), CY (9%), FR (10%), IE (12%), AT (13%), DE (15%), NO (15%), UK (15%), CZ (19%), MT (25%), NL (35%), SK (133%)

Source: Eurostat, 2010.

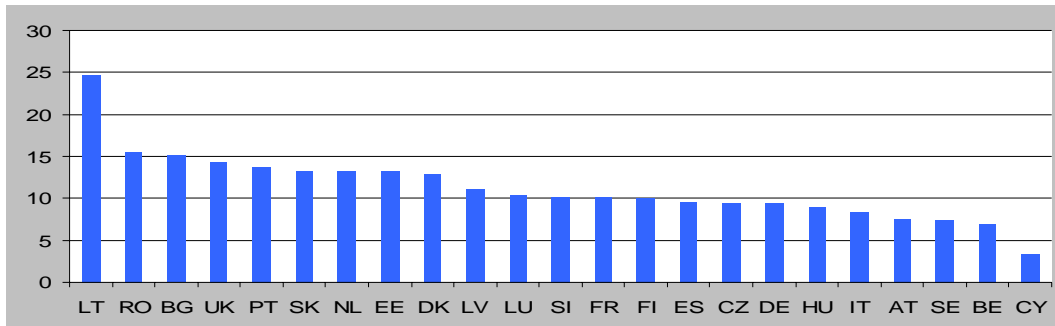
Across the EU-27, about 80% of citizens feel that it is difficult to start up a business due to a lack of available financial support; this was highest in Bulgaria, Greece and Latvia (91-92%), and lowest in Finland (56%), Austria and the Netherlands both with 63%. (The Gallup Organization, 2009).

It is also important to look into the enterprise birth and success rates to understand the entrepreneurial landscape in Europe. Americans are involved in three times as many new entrepreneurial ventures as Europeans, with European firms generally starting smaller, growing more slowly, and dying faster than their counterparts in the United States (European Commission, 2003; Volkmann et al.,

⁽⁷⁾ Note: 15 study countries were included in this survey in 2009 and 16 in 2010: Belgium, Denmark, Finland, France, Germany, Greece, Hungary (only 2009), Iceland, Ireland (only 2010), Italy, Latvia (only 2009), the Netherlands, Norway, Portugal (only 2010), Slovenia, Spain, Sweden (only 2010) and the UK.

2009). To create a strong base of innovative entrepreneurs, policies need to focus on supporting new business creation as well as supporting and guiding new businesses in their early stages.

Figure 4. **Enterprise births in 2007 (per 100 active enterprises)**



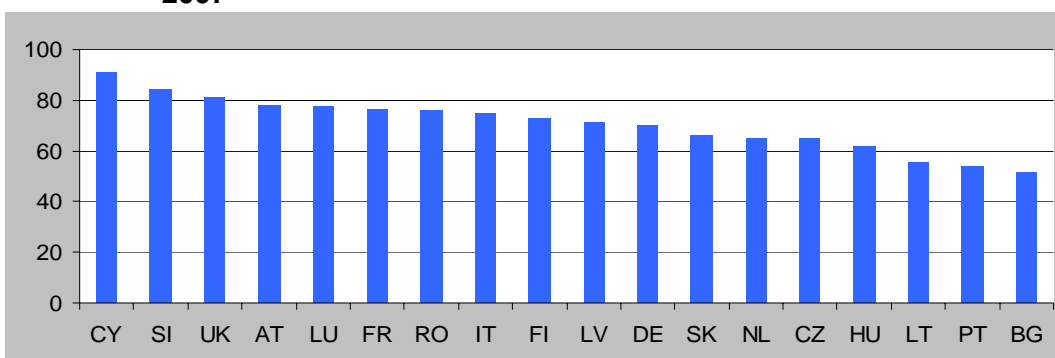
The indicator is the ratio between the number of enterprises created and the active number.

Source: Eurostat, 2007. Available from Internet:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=bd_9b_size_cl&lang=en
[cited 5.3.2011]

As shown by Figure 4, the business birth rate in Europe (the share of new enterprises as a percentage of all enterprises) ranges in Europe from 25% in Lithuania to just a little above 3% in Cyprus. This means that there is a high degree of new entrepreneurial activity in countries such as Bulgaria, Lithuania, Romania, Portugal and the UK. However, the business survival rate is the highest in Cyprus (which has the lowest new business birth rate), followed by Slovenia, UK, Austria and Luxembourg (see Figure 5).

Figure 5. **Percentage of 2005 business births that survive two years to 2007**



Data for Slovenia and France refer to 2004-06, data for the UK refer to 2003-05.

Source: Eurostat, 2007. Available from Internet:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=bd_9b_size_cl&lang=en
[cited 5.3.2011]

2.2.2. Profile of entrepreneurs in Europe

European entrepreneurs are a heterogeneous group (European Commission, 2003). They come from diverse backgrounds and represent people from all walks of life. However, a typical entrepreneur in Europe is male and educated to upper secondary level. A recent Swedish survey showed that a total of 94% of the survey respondents associated the word entrepreneur with a man, rather than a woman (Tillväxtverket, 2009).

The gender gap is very clear. According to Eurostat data (2010), in 2009, 70% of EU entrepreneurs were male, compared to just 30% of females. In Portugal, 40% of entrepreneurs are female, the highest across Europe. There are also higher levels of female entrepreneurs in Lithuania (38%) and Latvia (37%). Conversely, in Ireland and Malta, just 19% and 17% of entrepreneurs are female. The proportion of entrepreneurs who are female has remained relatively constant since 1999.

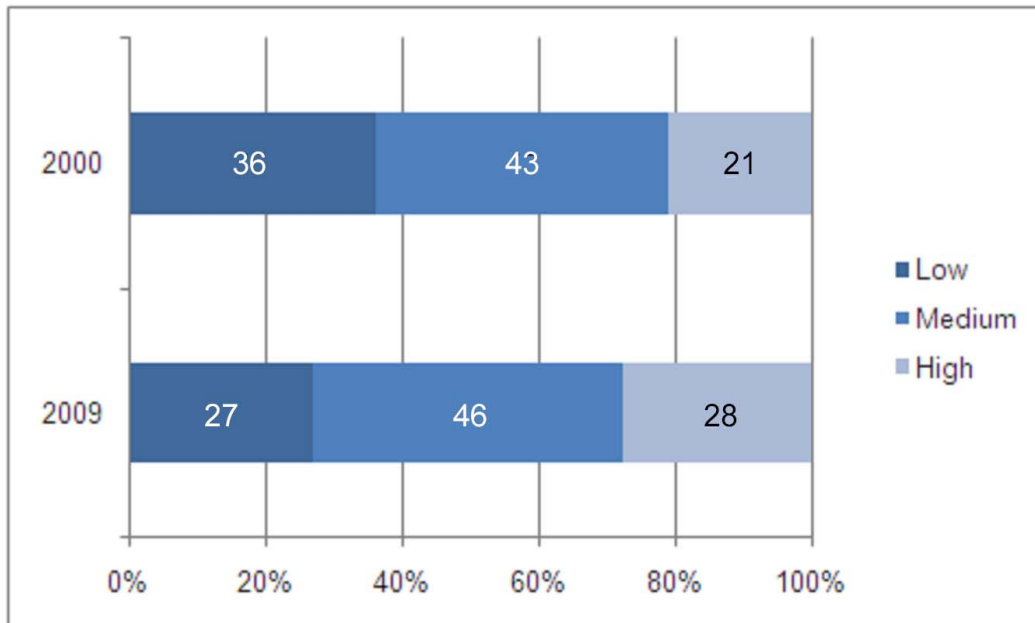
There are many reasons for why fewer women than men wish to set up and run their own business. The Eurobarometer household surveys on entrepreneurship have found that women seem to be less attracted by the idea of becoming entrepreneurs, and many have never thought about setting up a business: according to the survey 39% of women prefer to be self-employed compared to 51% of men (The Gallup Organization, 2009).

Men's and women's motivations for becoming entrepreneurs are also often different. For women, the motivations to avoid unemployment, to combine work and private life and the age of any children seem to be more important than for men (Schrör, 2006). Women also experience more difficulties than men in dealing with banks and entering informal financial networks (GHK and Technopolis, 2008). The lack of access to networks that provide information, advice, and finance and business contacts are another barrier (Allen, et al., 2008). The fact that women have less managerial experience, training and skills than men when they start as entrepreneurs is also a challenge (The Gallup Organization, 2009). The lack of visible female role models in business may also hinder women seeing entrepreneurship as a viable career option. Finally, some women are reluctant to take the risk of setting up their own business when they have young children (Graham, 2005) and generally speaking women are more risk averse than men (GHK and Technopolis, 2008).

A growing share of European entrepreneurs are highly educated; just over a quarter (28%) of European entrepreneurs are educated to a tertiary level (see Figure 6). This illustrates an increase of 32% from 2000. Conversely, while one-third of entrepreneurs had only a basic education in 2000, by 2009 this had

decreased to just over one quarter, due to a growth in those with higher levels of education.

Figure 6. **Education level of European entrepreneurs (EU-27), 2000-09**



Source: Eurostat, 2010.

Young Europeans are seen to have particularly strong entrepreneurial tendencies (Volkman et al., 2009). Some of the key barriers to entry, such as those linked to geography, have been removed with ICT developments; as global popular culture continues to be centred on youth, many young people have been able to exploit their fluency in digital technology to create successful businesses in music, video games, internet retail and other industries (Ibid.).

Entrepreneurship is also common among many migrant communities as it can contribute to reducing social exclusion and raising living standards (CEEDR, 2000). Studies show that, in certain EU countries, migrants demonstrate notably higher rates of self-employment than the native population (see Table 2). This is evident in Austria, Belgium, the Czech Republic, Denmark, Finland, France, Hungary, Latvia, Norway, Slovenia, Sweden and the United Kingdom. The opposite is true for Estonia, Ireland, Greece, Spain, Italy, Cyprus and Portugal.

Table 2. **Percentage of workers aged 15-64 years in self-employment by country of birth, 2009**

Country	Natives	Foreign-born	Country	Natives	Foreign-born
Austria	8.4%	9.4%	Latvia	7.2%	8.5%
Belgium	12.3%	14.5%	Lithuania	6.5%	n.a.
Bulgaria	8.6%	n.a.	Luxembourg	6.6%	6.5%
Cyprus	17.1%	10.5%	Malta	12.4%	n.a.
Czech Republic	15.6%	22.7%	Netherlands	11.6%	11.6%
Denmark	7.3%	11.1%	Norway	6.0%	7.0%
Estonia	7.5%	7.0%	Poland	11.5%	n.a.
Finland	10.2%	13.4%	Portugal	14.5%	12.6%
France	8.5%	11.2%	Romania	7.2%	n.a.
Greece	25.8%	10.4%	Slovenia	8.3%	9.1%
Hungary	10.8%	15.4%	Spain	15.6%	10.4%
Iceland	10.4%	n.a.	Sweden	8.4%	10.6%
Ireland	14.0%	9.4%	UK	12.0%	14.7%
Italy	22.6%	15.6%			

Source: Cedefop's calculations, based on Eurostat, Labour Force Survey, date of extraction 8 March 2011.

Agriculture, fishery and forestry are excluded from the calculations.

Various studies note differences between ethnicities in their likelihood of involvement in entrepreneurial activities. For example, in Germany, France and Romania, Turkish migrants are notable for their involvement in entrepreneurial activities, and in the UK the Chinese, Indians and Pakistanis are the main entrepreneurial immigrant groups (Triodos Facet, 2008).

Employment background also matters to entrepreneurial activity in Europe. For example, the likelihood of being involved in entrepreneurial activity is three to four times higher for those women who also are employed in a wage job (whether full or part time) compared to those who are not working, are retired, or are students (Allen et al., 2008).

When compared to non-entrepreneurs, both female and male entrepreneurs in Europe tend to be more confident in their own skills, are more likely to know other entrepreneurs, and are more alert to the existence of unexploited opportunities than individuals who indicate no entrepreneurial activity (Allen et al., 2008).

2.3. Entrepreneurial aspirations and career option

The status of entrepreneurship, and the attractiveness of it as a career choice, has an obvious effect on the entrepreneurial aspirations of individuals. Entrepreneurship has long been praised in countries like the US, but in others there are many, especially older people, who still view it more sceptically (Volkman et al., 2009). Some regard it as an unsafe and risky option, and less socially rewarding than some other career choices (European Commission, 2004b). It is therefore important to shed light on the views of Europeans on entrepreneurship as it has an impact on the guidance needs of prospective entrepreneurs and on the way in which education and guidance systems should approach the issue.

The 2009 Eurobarometer survey ⁽⁸⁾ on entrepreneurship indicates that Europeans still prefer a career as an employee as opposed to an entrepreneur: surveys indicate that slightly more Europeans wish to be employed (49%) than self-employed (45%) (The Gallup Organization, 2009). There has been no change in the number of Europeans wishing to become self-employed since the levels recorded in 2004. About half (50% in 2009) ⁽⁹⁾ have never even thought about starting their own business.

Although entrepreneurs have a positive image across all of the 28 European countries surveyed, there has been a reduction in the attractiveness of becoming an entrepreneur; in 2007, only 30% of non-self-employed respondents responded positively to whether it was desirable to become self-employed, a three percentage point reduction from 2004. However, it is interesting to note that there are significant differences between the older Member States and the new Member States: in 2007, only 28% of EU-15 citizens found self-employment an attractive prospect in comparison to 40% in NMS10.

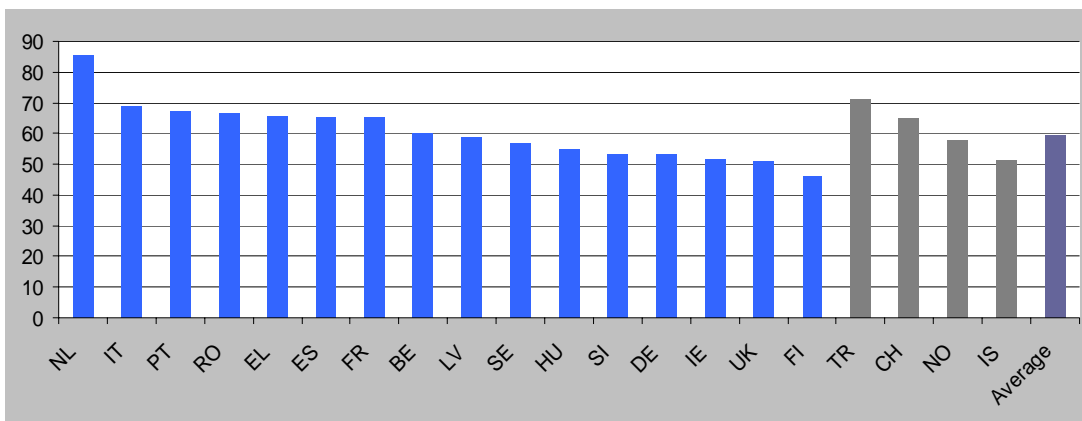
One significant potential for Europe is the fact that young people in the EU-25 are more attracted to self-employment than their older counterparts; over half (51%) of 15-24 year olds and half of those still in education favoured self-employment (The Gallup Organization, 2007). This can be seen most strongly among the NMS10 where 62% of 15-24 year olds favoured an entrepreneurial route. In contrast, across the EU-25, very few people aged 55 years and over were interested in following an entrepreneurial pathway over the next five years (13%).

⁽⁸⁾ The 2007 Eurobarometer Survey on Entrepreneurship aims to assess the development of entrepreneurship across the EU Member States and to identify the underlying factors that encourage entrepreneurial mindsets and activities (The Gallup Organization, 2007). In total, 20 674 individuals were interviewed through telephone surveys between 9 January and 16 January 2007.

⁽⁹⁾ Since 2009 the statistical data cover the EU-27 instead of the EU-25 as was earlier the case (2004 and 2007 Eurobarometer surveys).

Europeans have been also asked in the global GEM surveys ⁽¹⁰⁾ to indicate how they feel about entrepreneurship as a career choice (Kelley et al, 2010). Across the countries that participated in the GEM 2010 survey, around 59% feel that starting a new business in their country is considered a desirable career choice (see Figure 7). Across the EU, the level who feel entrepreneurship is a good career choice varies; it is lowest in Finland (46%), followed by relatively low levels in the UK, Iceland and Ireland ranging between 51-52%. Conversely, a high proportion of those in the Netherlands feel it is a good career choice; nearly nine out of 10 inhabitants feel so (85%). Although, the next highest value is Italy where 69% feel it is a good career choice, the level of agreement in the Netherlands is not necessarily felt elsewhere in the EU.

Figure 7. **Entrepreneurship as a good career choice (% of respondents in GEM Adult Population Survey APS 2010)**

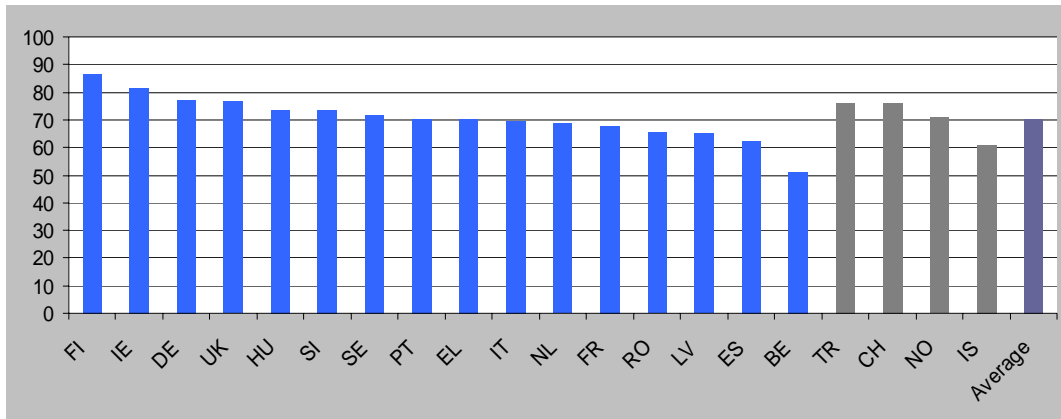


Source: Kelley et al, 2010.

The GEM surveys have also been used to gauge whether high status is given to successful entrepreneurs in their countries (see Figure 8). Finnish people are more likely to agree that high status is given to successful entrepreneurs within their country, despite a low level of agreement that being an entrepreneur is a good career choice. Finland is followed by Ireland and Germany. A low proportion of Belgians feel that high status is given to entrepreneurs in Belgium (51%), in line with inhabitants' belief that an entrepreneur is not necessarily a good career choice.

⁽¹⁰⁾ The Global Entrepreneurship Monitor (GEM) is the largest single study of entrepreneurial activity in the world. Available from Internet: <http://www.gemconsortium.org/> [cited 2.2.2011].

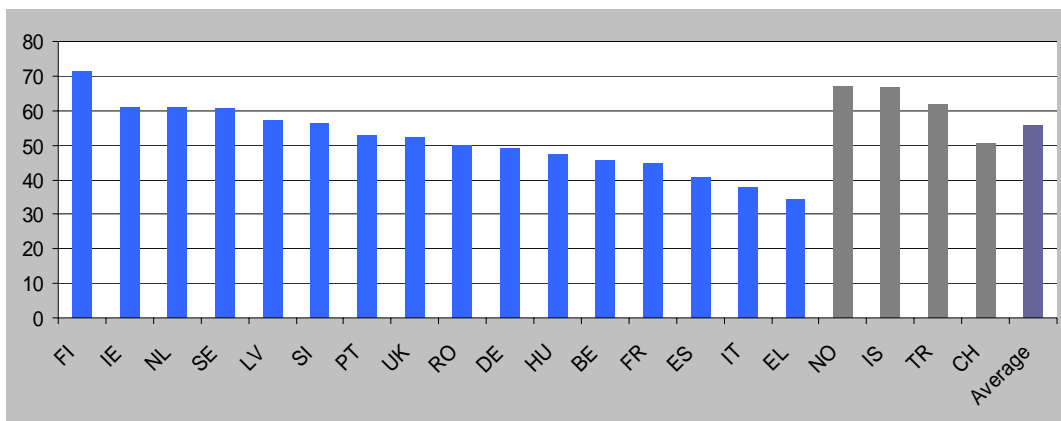
Figure 8. **High status given to successful entrepreneurs 2010 (% of respondents in GEM Adult Population Survey APS 2010)**



Source: Kelley et al, 2010.

The high status is linked to the way in which media perceives entrepreneurship. Around half of European inhabitants feel that media attention is given to successful businesses in their country (see Figure 9) (Kelley et al, 2010). A high level of media attention is given in northern parts of Europe, most notably in Finland (71%), as well as in Ireland, the Netherlands and Sweden (all of them around 61%), while relatively low levels can be found in Greece (35%) and Italy (38%).

Figure 9. **Positive media attention for entrepreneurship (% of respondents in GEM Adult Population Survey APS 2010)**



Source: Kelley et al, 2010.

The Eurobarometer surveys have also assessed the status of entrepreneurs in relation to civil servants and managers of large companies (The Gallup Organization, 2007). Across the EU, 32% feel entrepreneurs have the highest social status of the three and, according to the Eurobarometer 2009 survey, the highest ranked were liberal professions. Generally, however, managers are deemed to be of a higher social status than entrepreneurs with the exception of

five countries (Greece, Cyprus, Latvia, Lithuania, and Netherlands). However, job satisfaction among entrepreneurs is higher than among the employed. In a survey from 2000, 33% of self-employed without employees and as many as 45% of self-employed with employees reported being very satisfied with their working conditions against only 27% of employees (European Commission, 2003, p. 7).

These findings have significance to the study because they show that there is a great degree of variety in European countries in terms of how entrepreneurship is perceived by the general public and the media. Education, training and guidance services and media can be used as channels to improve general perceptions of entrepreneurship.

2.4. Business formation skills

Surveys indicate that most Europeans do not feel ready to start their own business venture. Only around 40% of Europeans feel that they have the skills necessary to start a business (Allen et al., 2008; Bosma and Levie, 2009). Residents of Greece (58%), Slovenia (52%) and Iceland (50%) are more likely to believe that they had the entrepreneurial skills required. Conversely, only one in four felt that they had the requisite skills in France.

In addition to skills, the availability of opportunities for setting up businesses plays a factor in their aspirations. Less than one third of Europeans feel that there are opportunities to start a firm in the area where they live (30%) (Allen et al., 2008; Bosma and Levie, 2009); across innovation-driven economies more broadly, only one-fifth of inhabitants think such opportunities exist. In Belgium (15%) and Spain (16%), a lower proportion of inhabitants feel that entrepreneurial opportunity exists while almost half of Norwegians think that opportunities are to be had in starting up a business (49%).

Around a third (35%) of Europeans who feel that there are opportunities to set up a business in their area, state that a fear of failure would prevent them doing so. The fear of failure is less prevalent in Belgium (25%), Norway (25%) and Finland (26%), but much higher in Greece (45%), Spain (45%) and France (47%). Also, the economic crisis plays a role as the attitudes of early-stage entrepreneurs towards starting a new business were more pessimistic in 2010 compared to the year before. More than half of the entrepreneurs stated that turbulent economic conditions can diminish new start-ups and reduce risk-taking. The critical attitudes were highly visible in Greece (76%), Spain (72%) and Portugal (62%). (Kelley et al, 2010).

Population figures for people who have received entrepreneurial (business-creation) training vary throughout Europe ⁽¹⁾. Greece, France, Italy and the United Kingdom show similar levels for working-age adults who have received education in starting a business (around 17-19%) (Martínez et al., 2010). Spain, Denmark and Germany show slightly higher levels (21-22%) and Croatia, Hungary, Ireland, Iceland, and Latvia even higher (25-29%). Belgium, Slovenia and Finland had the highest percentage of working-adults with training in business-formation (33% of the Belgian, 36% of the Slovenian and 49% of the Finnish population). By contrast, only 8% of Romania's adult population have received training in starting a business.

2.5. Entrepreneurship learning in Europe

2.5.1. Introduction

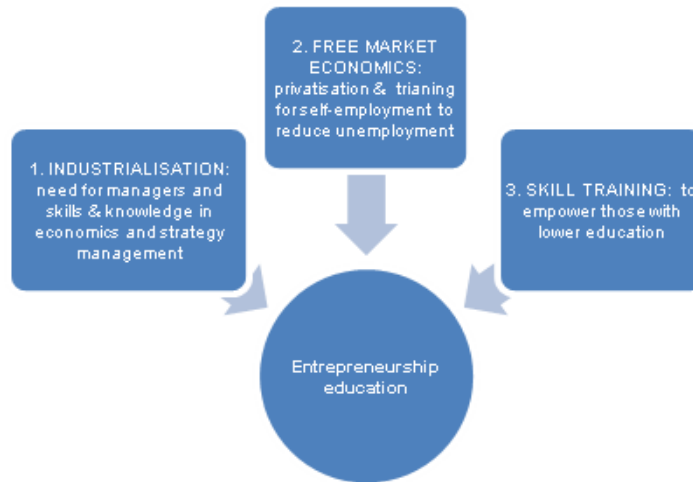
The impact of entrepreneurship learning on individual attitudes, actions and aspirations linked to entrepreneurship is of particular interest to policy-makers and practitioners of education and economic development. It is generally believed that individuals who perceive they have the skills and knowledge to start a business are more likely to do so.

Entrepreneurship education started over a century ago, with organisations such as Junior Achievement as pioneers (Volkman et al., 2009, p. 19). The first programme was introduced by Harvard University in 1945 to stimulate the USA post-war economy (Mitra and Manimala, 2008, p. 46), followed by an MBA established in 1947 and entitled Management of new enterprises (Katz, 2003). Three distinct ideas (see Figure 10) have notably shaped the development of entrepreneurship education since. An early influence was the need for efficient and effective managers who had the skills to motivate and manage staff in large companies. The prevalent economic thinking was to capitalise on economies of scale, seeing people as a resource to be managed.

From the 1970s onwards there were successive privatisations and entrepreneurship was seen as a way to address high levels of unemployment. Entrepreneurship education was extended from purely management training to include training for self-employment. More recently, entrepreneurship education has been related to personal development and a way to empower those with lower education to participate in the labour market.

⁽¹⁾ Information based on 15 European countries only: Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Hungary, Italy, Latvia, the Netherlands, Norway, Slovenia, Spain and the UK.

Figure 10. **Ideas that have influenced the development of entrepreneurship education**



Source: Volkmann et al., 2009.

It becomes clear from the evolution of entrepreneurship learning in Europe that there has been a long debate about whether entrepreneurship can be taught or, more importantly, learned. However, it is today strongly believed that education, inclusive of entrepreneurship education, has a part to play in shaping people's attitudes and developing their skills. It is also believed that 'the earlier and more widespread the exposure to entrepreneurship and innovation, the more likely students will become entrepreneurial, in one form or another, at some stage in their lives' (Volkmann et al., 2009, p. 10; European Commission, 2004b; Martínez et al., 2010; Rodríguez, 2009). That early exposure to entrepreneurship education should continue 'throughout an individual's lifelong learning path', from primary and secondary level, to further and higher education, and reach out to the socially and economically excluded as well.

For these reasons, entrepreneurship education is now a prominent focus of government activity across Europe. Member States agree that entrepreneurship learning should develop both general competences, e.g. self-confidence, adaptability, risk-assessment, creativity, and specific business skills and knowledge that are needed to start up a new business venture (European Commission, 2004b; European Commission, 2006b; McCoshan et al., 2010, p. ii; Rodríguez, 2009). It should also develop entrepreneurial drive among students, and build the ability of students to identify and exploit opportunities for entrepreneurial purposes. The skill building side of entrepreneurial learning should not only aim to build the skills to plan and launch a company but also to manage its growth. Ethical and social dimensions related to responsible entrepreneurial activity should also be taken into account. Entrepreneurship

learning should also raise individuals' awareness of entrepreneurship as a career choice, with the message being that 'you can become not only an employee, but also an entrepreneur' (European Commission, 2004b, p. 6). Entrepreneurship is today seen as a key competence for all, and is linked to individual's ability to turn ideas into action. Such skills and attitudes are directly linked to concepts such as creativity, sense of initiative, innovation, pro-activity, determination, independence, responsibility, risk acceptance and the ability to plan and manage projects.

Across Europe, entrepreneurship is being taught through four main channels:

- as a separate subject/course/qualification, with a focus on learning the skills and know-how of setting up and running a business, or having a more theoretical focus;
- as an extra-curricular, usually voluntary/elective, subject;
- as a mainstream subject in the curriculum, typically focusing on the development of transversal competences related to entrepreneurship such as initiative, confidence and creativity;
- as a non-formal course delivered in the adult education or private sphere.

So far, entrepreneurship learning practice in Europe tends to be ad hoc. Some schools provide no entrepreneurship education at all and most students do not yet have the opportunity of taking part in entrepreneurship courses and programmes (European Commission, 2004b; McCoshan et al., 2010). There are pockets of excellence in terms of countries and individual schools, and other education and training institutions, but overall the provision varies vastly in quantity and quality. The main shortcoming is that entrepreneurship learning is still not a mainstream part of the curriculum in most countries (European Commission, 2004b; European Commission, 2006b; Mendibil, 2006), and therefore 'has relied heavily on the enthusiasm and commitment of individual teachers and schools' (McCoshan et al., 2010, p. ii). This also means that third sector organisations, such as Ja-Ye ⁽¹²⁾, Europen ⁽¹³⁾ and Jade ⁽¹⁴⁾, have

⁽¹²⁾ JA-YE Europe is Europe's largest provider of entrepreneurship education programmes, reaching 3.1 million students in 38 countries in 2009. Available from Internet: www.ja-ye.org [cited 03.09.2010].

⁽¹³⁾ Europen is the worldwide practice firm network with over 5 500 practice firms in 42 countries. A practice firm is a virtual company and a centre of vocational learning that runs like a 'real' business silhouetting a 'real' firm's business procedures, products and services. Each practice firm trades with other practice firms. Available from Internet: <http://cms.europen.info/> [cited 03.09.2010].

⁽¹⁴⁾ JADE – the European Confederation of Junior Enterprises – is a non-profit international umbrella organisation of enterprises established and managed by students. The junior entrepreneurs (members of junior enterprises) are students who want to get practical experience during their studies by developing their own professional projects and by offering different consulting services, experiencing unique learning opportunities in the real business world. The

become important partners for schools, training institutions and authorities by providing significant expertise and alternative methods to teaching entrepreneurship, mainly through mini and virtual companies, business competitions and other awareness-raising activities. They have also had an important impact in creating close linkages to private companies, which often act as partners, sponsors, mentors and jurors in entrepreneurial activities run by these organisations. This has also meant that many entrepreneurial activities in Europe have been driven by external actors rather than the education system itself (European Commission, 2004b).

The key reason for the ad hoc approach to entrepreneurship learning in Europe is the lack of appropriate national strategies; the inclusion of entrepreneurship in the curriculum and/or national strategy is usually a good indicator of political commitment. In 2007, only six Member States had embedded entrepreneurship in the national curriculum for compulsory education. These included Spain, Ireland, Cyprus, Poland, Finland and the UK (Rodríguez, 2009). The situation had improved quite considerably by 2009 with more countries having incorporated entrepreneurship in the curriculum (e.g. Austria, Hungary) (McCoshan et al., 2010). Further, around a third of European countries had created a strategy on entrepreneurship learning (see Table 3) and a further nine countries were in the process of doing so. A number of other countries had integrated entrepreneurship in other key strategies, such as the one on lifelong learning (e.g. Bulgaria, Czech Republic, Estonia, Latvia and Luxembourg).

Table 3. **National strategies for entrepreneurship learning**

National strategy in place	National strategy planned
Belgium (Flanders), Denmark, Finland, Lithuania, Netherlands, Norway, Portugal, Sweden and UK	Austria, Belgium (Walloon), Estonia, Iceland, Ireland, Malta, Poland, Slovenia and Spain

Source: McCoshan et al., 2010.

Entrepreneurial learning pedagogy is typically characterised by interactive and experiential methods, which require students to take an active role in the learning process, which is based on real-life situations and simulations. These include: group learning and assignments; interactive methods with businesses and entrepreneurs, including visits to companies; practical, hands-on learning (trial and error); developing creativity; problem-solving; business simulations and games; student run businesses; and business competitions. New teaching

network offers them the opportunity to exchange knowledge and experience and also work together on international projects. Available from Internet: <http://www.jadenet.org/> [cited 03.09.2010].

pedagogies and cross-disciplinary content present challenges for educators and institutions.

The next two sections briefly examine entrepreneurship learning in IVET and HE, the two sectors at the core of this study.

2.5.2. Entrepreneurship learning in IVET

Entrepreneurship is a particularly important issue for the providers of vocational education and training because the vocational nature of learning means that entrepreneurship, self-employment in particular, is a very realistic aspiration for many of their learners. This is the case, for example, for hairdressers, plumbers and electricians; many students from those fields end up setting up their own business.

It is not surprising that entrepreneurship plays a bigger part in the agenda of IVET institutes than for providers of general education. It is included in the national curricula for VET in most European countries, at least to some extent (European Commission, 2010a): included, are Austria, Cyprus, Czech Republic, Estonia, Germany, Hungary, Luxembourg, Norway, Poland, Slovenia, Slovakia and Spain. As an example, in Luxembourg, entrepreneurship education is embedded in the curriculum for agricultural studies. In some of those countries (such as Spain, Estonia and Poland) participation is compulsory, but in most cases entrepreneurship is an optional subject or is compulsory only in some parts of the vocational education system and not in others (*ibid.*).

France is the only country where entrepreneurship is very closely linked to career guidance provision, though it is not included in national curriculum. Entrepreneurship is not included in the national curriculum for VET in countries like Italy but legislation invites schools to promote a link with the labour market and there are many entrepreneurship programmes with a local/regional focus.

Qualification guidelines include different elements of the key competence 'a sense of initiative and entrepreneurship' in some countries (for example, Finland, Hungary, Lithuania, Netherlands, Norway, Slovenia and Slovakia) (GHK, 2009). National framework documents on VET in Lithuania state that entrepreneurship should be integrated into all programmes; however, there are no practical guidelines for this. As a result, entrepreneurship is not mentioned in training programmes offered by VET schools, and students who graduate from a vocational school normally do not possess any specific entrepreneurial competence.

Specific modules are included in apprenticeships or other vocational qualifications in a few countries (Belgium (Flanders), Spain, Hungary and Finland). Methodology which promotes interaction and discovery is stressed as

an important vehicle for developing sense of initiative and entrepreneurship in Estonia and Sweden (ibid.).

At least nine countries (Estonia, Spain, Cyprus, Luxembourg, Hungary, Austria, Poland, Romania and the UK) report that nearly all (90-100%) VET students participate in entrepreneurship programmes at some point during their VET studies (ibid). In some other countries the share of beneficiaries is much smaller, making just 5-15% of all IVET students (e.g. Bulgaria).

Entrepreneurship learning in IVET is delivered in both formal and non-formal settings (European Commission, 2006a). Overall it is recognised that for successful delivery, it must include some real life 'immersion' into the project, and a variety of techniques have commonly been used. These include simulations, student competitions and mini-enterprises, as well as through contact with real entrepreneurs, either through guest lectures, visits or even collaborations (Onstenk, 2003). Most commonly used methods in VET include lectures, computer simulations and business games, student companies, project and group work, company visits and work placements. Less frequently mentioned techniques include coaching and mentoring, role play, discussions and brainstorming, and case studies.

One of the key challenges concerns IVET teachers. There is a need to improve the ability of teachers and trainers to understand and to teach entrepreneurship. A lack of trained and motivated teachers is a barrier to the implementation of entrepreneurship programmes and courses (European Commission, 2004b). Teachers, specifically, need to be trained in the following areas to deliver entrepreneurship education (European Commission, 2010a):

- project management skills (e.g. planning, setting personal targets, evaluating);
- pedagogical skills (e.g. suggesting and guiding rather than giving instruction);
- personal skills (e.g. active listening, negotiation, team work).

2.5.3. Entrepreneurship learning in HE

The first entrepreneurship education programme was introduced by Harvard University in 1945 to stimulate the USA's post-war economy. Other universities followed suit and the concept of entrepreneurship education was born. From the early 1970s, there was dynamic development and from the 1980s onwards entrepreneurship education spread to Northern Europe, then to Central and Southern Europe and to the rest of the world from the mid-1990s (Volkman et al., 2009).

However, the development of entrepreneurship education was much slower in Europe than in the USA (albeit with a number of notable exceptions). In most Western European countries relevant degrees and modules were developed only

in the late 1990s and the majority of these were primarily linked to business schools. Entrepreneurship learning is still a relatively new phenomenon in many European countries, particularly in Eastern Europe. A report by the OECD commenting on entrepreneurship education in Europe, noted that, 'entrepreneurship education is still in its infancy' (Potter, 2008).

Over the past decade, nevertheless, there has been an exponential rise in the number of higher education institutions (HEIs) offering entrepreneurial learning opportunities. As Wilson (2004) identifies, out of the 70 (approx.) entrepreneurship centres ⁽¹⁵⁾ in Europe, the majority were established between 2000 and 2005. In Germany, for example, the number of chairs in entrepreneurship rose from 1 in 1998 to 58 in 2008 (Achleitner et al., 2007; European Commission, 2008a). Similarly, entrepreneurship education has significantly grown between 2005 and 2008 in Ireland; some 26 HEIs deliver approximately 400 modules relating to entrepreneurship and a further 22 Centres for Enterprise and/or Innovation are also involved in such activities (Cooney and Murray, 2008). In more general terms, the European Commission (DG Enterprise and Industry) study confirmed the position of Germany and the UK as strong performers in entrepreneurship education, with the situation being much weaker in countries like Czech Republic, Estonia and Latvia (European Commission, 2008a).

Significant for this study is that more than half of Europe's HE students do not have access to entrepreneurship education, indicating that there is scope to extend it further within HEIs across Europe. The study states that, despite the growing number of initiatives on entrepreneurship in Europe, more than half of Europe's students in HEIs still do not have access to entrepreneurship education. This means that approximately 11 out of the 21 million HE students in Europe do not have the opportunity to engage in curricular or extra-curricular activities in this field. The same survey suggested that in those institutions where entrepreneurship education is available, approximately half of the students were engaged in some kind of entrepreneurial education activity. This implies that approximately five million students in Europe are engaged in entrepreneurship education.

Interviews carried out for this study with national entrepreneurship experts revealed that while some HE qualifications in entrepreneurship are available in most European countries, the quantity and availability of these qualifications varies widely between countries. For example, Romania only has two degrees

⁽¹⁵⁾ For the purpose of that study entrepreneurship centres were defined as the centres offering dedicated entrepreneurship research, teaching programmes or other activities (i.e. not student or alumni groups, etc.).

available whereas in Norway, entrepreneurship education is reported as being 'fairly well established'. In France, Latvia, Lithuania and Poland, national experts reported that modules on entrepreneurship were available, but that no degree courses were in place. In Hungary and Iceland only business school students have the opportunity to specialise in entrepreneurship.

Entrepreneurship education is still more commonly available in business schools than in other departments. For instance, 61% of entrepreneurship modules in England are taught in business schools, whereas 9% are taught in engineering departments and only 1% in health and medicine (National Council for Graduate Entrepreneurship (NCGE), 2007). Similar results were reported in Spain, where more than half of the modules were taught in economic and business sciences and the rest were taught in technology, social sciences and health sciences.

A number of sources, however, have pointed out that business schools are not the most appropriate places to teach entrepreneurship (European Commission, 2008; Potter, 2008, p. 53). Entrepreneurial ideas often originate in the departments of science, engineering or technology and the introduction of entrepreneurship courses with interdisciplinary orientation can create opportunities for collaboration between business experts and those from other departments. Such an approach supports joint technological developments, innovations and commercialisation, and collaboration can ultimately lead to new high-growth ventures or spin-offs from universities and colleges. In the US, approximately 74% of universities and colleges offer entrepreneurship programmes to their total student population (Volkman et al., 2009).

A number of universities in Europe have started to take an interdisciplinary approach by embedding entrepreneurship into their curricula. Most often this takes the form of an elective modular approach, which has created new opportunities to exploit business ideas generated, for example, in science and humanities departments. Queen's University, Belfast provides one of the best examples of this approach: since 2000 the university has established a pioneering model of entrepreneurship education within the curriculum and entrepreneurship education is currently available for all humanities, social sciences and hard sciences students.

Interdisciplinary programmes are more commonly available in West European countries (e.g. Belgium, Denmark, France, Ireland, Iceland, Portugal, Spain, Sweden, United Kingdom) than in Eastern Europe and tend to be found in Science and Engineering departments. In other countries such initiatives are relatively new (Greece), rare (Lithuania, Hungary, Poland, Romania) or non-existent (Latvia, Malta, Slovenia, Slovakia). There have been improvements in

the delivery of entrepreneurship education in Central and Eastern Europe in recent years. In Latvia, for example, efforts have been made to include entrepreneurship education in the curricula of all universities and polytechnics. The Latvian government has set a target of integrating an entrepreneurship module (96 hours of learning) into all its study programmes, including those of humanities, social and natural sciences.

Similar improvements are also under way in other East European countries (Lithuania, Poland, Slovenia and Slovakia). However, in other new Member States (Malta and Romania) less progress has been made towards the inclusion of entrepreneurship in the curricula of HEIs.

Within this context, HEIs have a particularly important role in promoting high-growth entrepreneurship, as high growth entrepreneurs are better educated than other entrepreneurs and the general population (Volkman et al., 2009). Research carried out in Germany has shown that enterprises started by individuals with university degrees tend to grow faster than enterprises founded by non-academics (Volkman et al., 2009).

Finally, several studies identify that there is limited supply of well qualified entrepreneurship teachers and entrepreneurs who can act as role models for students (European Commission, 2008a; Potter, 2008). This is one of the key barriers to further development of entrepreneurial learning in HE.

2.6. Summary

Since the Lisbon Council in 2000, entrepreneurship is increasingly recognised as a competence that should be valued and nurtured within an education and training context. It sits at the heart of the education and training 2020 strategic framework, which cites innovation and creativity, including entrepreneurship, as one of its strategic objectives. A sense of initiative and entrepreneurship is also one of the eight key competences for lifelong learning. However, while there is widespread recognition of the importance of guidance in supporting lifelong learning, European policies rarely refer to the role of guidance in entrepreneurship learning or the development of entrepreneurs' career management skills.

Entrepreneurship learning supported by guidance, has a role to play in developing entrepreneurial skills; exposure to such support can act as a catalyst in developing an entrepreneurial mindset, irrespective of whether individuals go on to become entrepreneurs. Entrepreneurship education exists within Europe, though is not necessarily available for all: it is ad hoc and comprises 'pockets of

excellence' accessible by some, with no provision or support for others. Political will is important in driving entrepreneurship learning: only around a third of European countries have strategies to support its implementation, though such strategies were under development in a further nine countries. Such strategies are crucial in helping to stimulate new business formation, as well as drive the inclusion of entrepreneurship learning in education and training curricula.

While acknowledging that business start-up is risky, surveys findings that individuals' perceptions need to change to support the development of entrepreneurial skills and competences.

The numbers of new business start-ups in Europe has grown over the past 10 years. While people become entrepreneurs through choice or necessity, the recent financial crisis has acted as a catalyst for people setting up businesses out of necessity. Fear of failure acts as a barrier to business start-up as does a perceived lack of opportunity: less than half of Europeans believe that they have the skills to become an entrepreneur.

Entrepreneurs in Europe are a diverse group, though a 'typical' entrepreneur is male and educated to upper secondary education level. Just over a quarter of entrepreneurs have a basic level of education, while a growing proportion is educated at degree level. On average, less than a third of entrepreneurs are female (30%).

Entrepreneurship learning is important in IVET as self-employment is a realistic aspiration for students: many VET students often establish their own businesses. Entrepreneurship features in the national curricula for VET in most European countries. Learning opportunities for VET students are delivered in formal and non-formal settings that include simulations, competitions and mini-enterprises. A key challenge for teachers and trainers is to ensure that they have the skills to understand and teach entrepreneurship.

The past decade has seen an exponential rise in entrepreneurial learning opportunities in European HEIs, though coverage remains patchy. Particular issues that warrant attention include:

- providing access to entrepreneurship learning for all students: more than half of Europe's students in higher education have no access to entrepreneurship education, indicating that there is a massive gap to be filled;
- taking entrepreneurship learning out of business schools, promoting interdisciplinary approaches and developing entrepreneurship skills among 'hard science', arts, social science and humanities students;
- understanding how examples such as Queen's University, Belfast, which takes a holistic, institutional approach to entrepreneurship learning, can be transferred to other HEIs.

The rise in the total number of entrepreneurs in Europe, as well as a rise in the numbers of entrepreneurs educated at medium and high levels, indicates that IVET and HE provide a fertile ground for new and emerging talent. Providing wider access to entrepreneurship learning could have a positive effect on business formation rates in the coming years if IVET providers and HEIs are equipped to support students.

The following three chapters explore how guidance can help promote entrepreneurial aspirations and equip Europeans with appropriate skills for entrepreneurship. The first two Chapters (three and four) focus on the availability and role of guidance in supporting the entrepreneurship agenda of IVET and HE institutions. Chapter 5 reports on the availability of guidance and other support to develop the career management skills of aspiring and novice entrepreneurs.

CHAPTER 3

Guidance in the entrepreneurship agenda of IVET institutions

Education for entrepreneurship can be particularly effective for students in vocational education and training, as many vocational occupations have high proportions of self-employment. Entrepreneurship related interventions, however, need to take into consideration that many IVET students are considered minors by law, preventing them from establishing a corporate entity or borrowing in their own name (Volkman et al., 2009).

Nevertheless, it is a good age to engage young people in innovative and creative thinking and familiarise them with enterprising attitudes and behaviour. Activities at this level should also start the process of equipping students with core entrepreneurial skills and competences, such as those related to creating business plans. They should also help students in the career exploration process by presenting opportunities to understand aspects of the day-to-day life of entrepreneurs.

Guidance manifests itself in the entrepreneurship agenda of IVET institutions in many different ways. The role of non-formal guidance is stronger than that of formal guidance. Our study suggests that while the provision of printed and digital material on entrepreneurship is the most commonly used method to spread information about entrepreneurship as a career among IVET students in Europe, the impact of non-formal methods can be greater. For example, involving entrepreneurs in the guidance process itself is one of the most effective ways of helping students to understand what a career as an entrepreneur means. Chapter 3.1 explores the ways in which the study countries have responded to this demand. Guidance in initial VET can also help to build foundations for entrepreneurship education and entrepreneurial activity. These foundations can be built by enhancing student understanding of key entrepreneurial principles, such as confidence, creativity and 'can-do' attitude. This is discussed in Chapter 3.2.

Chapter 3.3 provides illustrations of the ways in which IVET institutes aim to familiarise students with the enterprise concept. Such activities can help students to understand what is required of entrepreneurs and what types of skills and competences they need to develop if they are to start a business venture. Chapter 3.4 focuses on mini-companies, an all-encompassing term for practice

companies: real-life student companies, business simulations and virtual companies. In a similar manner to other enterprise familiarisation activities, mini-companies have guidance embedded in the process itself as they allow students to experience how companies are actually launched and operated.

Finally, there is recognition of the need for effective training, guidance and support for teachers delivering entrepreneurship education. Ensuring that teachers and guidance professionals involved in entrepreneurship education are fully trained and supported, and have access to guidance materials to enhance their training, is essential. Chapter 3.5 examines the availability of training and support for teachers delivering entrepreneurship education in the study countries. It also examines the availability of support for guidance professionals within IVET.

3.1. Involving entrepreneurs in the guidance offer

Choosing a career can be a daunting task for a young person still at school. While studying, most students may not have the time to consider various aspects of career planning such as interests, attitudes, skills, training, economic climate and the availability of work. The growing number of education and training pathways can also add to the sense of confusion. The career guidance process, therefore, needs to be supportive and take into consideration the pressures faced by young people, rather than adding to its complexity. With respect to career guidance in entrepreneurship, it is critical that a process that seeks to familiarise young people with the 'world of entrepreneurship' involves entrepreneurs themselves. Entrepreneurs are in the best position to explain and show what life as an entrepreneur involves and how young people can go ahead and pursue such a career.

It is, however, not an easy task to involve entrepreneurs, small business owners in particular, who rarely have time to dedicate to such activities, or do not see any benefit in cooperating with schools (European Commission, 2010a). It is also difficult for schools and training institutions to reach out to small business owners. This section of the report examines some of the approaches that either authorities or individual IVET schools have used to involve entrepreneurs in the guidance offer in a more systematic manner. These approaches include:

- work placements and company visits;
- role models;
- job shadowing.

3.1.1. Work placements and company visits

It is increasingly common for IVET institutions to involve employers in guidance. Some of the mainstream ways of doing this include work placements, visits to work places and lectures by employers. Cooperation with enterprises is well established in countries with a dual system, like Germany and Austria. Placements are also a statutory requirement in countries such as Bulgaria, Denmark, Spain, Cyprus, Luxembourg, Malta, Slovenia, Finland and the UK where vocationally orientated schools provide all students with work-related learning. In many other countries (e.g. Estonia and Poland), this type of activity is not centrally regulated but depends on the initiative of teachers. Company visits and/or lectures by employers and other business professionals are common in countries like Belgium, Denmark, Malta and Netherlands.

Work placements in many cases have an entrepreneurial dimension, especially when they are organised in SMEs. However, the common weakness of work placement schemes is that while they introduce pupils to specific occupations and economic activities, placements in larger companies less commonly promote entrepreneurial values or aspirations. This was mentioned by several national experts, including those from Belgium and UK. In many cases, work placements do not specifically target self-employed people or business owners and no explicit links to business creation are made, so they do not necessarily encourage young people to be more entrepreneurial. Instead they involve young people in activities that give a taste of different careers, but not of entrepreneurship. In principle, work placements should build entrepreneurial skills and promote entrepreneurship but, in practice, unless they are tailored to the entrepreneurship agenda they support more general employability goals.

Some schools and countries are making a conscious effort to involve more self-employed people and business owners in company visit/work placement schemes, especially in sectors characterised by high proportions of self-employment. In Malta, the IVET sector aims to support entrepreneurial goals through work placements and visits to local businesses. Business visits include meetings with entrepreneurs and ex-students who have started their own business successfully. They provide an opportunity for students to talk with entrepreneurs about their experiences, the skills they require and those they have acquired. Particularly when ex-students are involved, students can identify with them and realise that they can follow a similar career path. A similar practice is in place in Slovakia where a system of business professionals/volunteers has been established. The volunteers visit schools and training institutions which run entrepreneurship activities and give business advice.

Ireland is unique in a sense that there is a programme in place to ensure systematic involvement of micro-enterprises. The SME business support network assists company visits for students on IVET programmes (Leaving certificate vocational programme and the Leaving certificate applied). This programme, known as Enterprise encounter, brings senior IVET students into direct contact with entrepreneurs in their locality, through visits to small businesses. The goal is to give students a real insight into what is required to set up and run a business and to inculcate an entrepreneurial mentality in their way of thinking about their future career options (see Example 1).

Example 1. Enterprise encounter: company visits to SMEs, Ireland

The county and city enterprise boards (CEBs) were established in Ireland in 1993 to provide support for small businesses with 10 employees or less, at local level. The national network of CEBs, in conjunction with the Department of Education and Science, has developed an initiative called Enterprise encounter. It supports teachers in delivering an active, student-centred programme in enterprise awareness. It is aimed at IVET students (students on the Leaving certificate vocational and the Leaving certificate applied programmes).

Enterprise encounter brings senior students into direct contact with entrepreneurs in their locality, through planning, organising and making one-off investigative visits to small businesses. These visits take place during school time for a maximum of one hour and involve a small team of students interviewing the entrepreneur about his/her career and business.

The Enterprise encounter experience provides students with an insight into the courage, drive, persistence and vision required to set up and run a business. From an entrepreneur's perspective there are also benefits, such as raising the profile of the entrepreneur's business in the local community.

3.1.2. Role models

Another successful approach – one still too rarely available – is that involving role models. Wales is one country where a concerted effort has been placed on finding and recruiting active and successful entrepreneurs to act as role models in schools, colleges and universities, including vocationally orientated establishments. As part of the Dynamo role model programme, entrepreneurs who 'epitomise' the spirit of entrepreneurship have been hand-picked to act as role models. They have been trained to provide inspirational yet realistic presentations about their experiences, encouraging students to think positively about their career options (Arad Consulting, 2007). They speak to approximately 60 000 pupils/students every year (see Example 2).

Example 2. **Entrepreneurs as role models, Wales**

Dynamo is part of a range of activities under the Entrepreneurship action plan for Wales (EAP). Dynamo role models are business owners who have been recruited and trained to 'enthuse' young people and convey positive messages about entrepreneurship. They achieve this by visiting schools and colleges to deliver presentations in the classroom during which they share their experiences of owning and running a business with groups of pupils and students. The hour long presentations and accompanying activities offer young people a real insight into what it is like to run a business. They also outline the skills and attributes required to be a successful entrepreneur, and explain their personal entrepreneurial journeys. The five key points that all role models are encouraged and trained to promote through their activities include:

- encourage self-belief and positive thinking;
- inspire and motivate pupils to realise they are in control of their own future;
- educate about the reality of 'being your own boss': highs, lows, risks and rewards;
- draw out entrepreneurial characteristics and encourage pupils to reflect on them;
- stimulate entrepreneurial behaviour in pupils.

The Role Models also occasionally visit and present in entrepreneurship-oriented festivals, careers fairs and other business events.

Role models

Role models are recruited through a variety of methods, the most common being word of mouth through referrals of fellow role models. Advertisements, Careers Wales (a Welsh service agency for information, advice and guidance) and recruitment agencies have also been used. The project team has also targeted individual business owners who are considered appropriate candidates.

Role Models are required to attend a two-day training course. They are offered a fee in return for each presentation they make. This fee is offered as a cost reimbursement payment as opposed to a professional fee. Costs per presentation vary from GBR 87 to GBR 188 (EUR 104-EUR 226).

Over 300 role models are currently registered and they have carried out tens of thousands of presentations to hundreds of thousands of pupils/students over the last few years.

An external evaluation concluded that the role model programme has been well received in schools across Wales. The interactive and participative approach of role models works particularly well with school-age children, while new approaches are being developed to address HE students.

Impact

The realistic accounts of the journeys of the entrepreneurs appear to make a big impression on pupils and suggest a clear impact in terms of enthusing them and overcoming stereotypical perceptions of business owners. Role models themselves consider that they make a positive difference through raising aspirations and promoting 'can-do' attitudes among pupils and students. The fact that role models are local entrepreneurs, who come from the communities served by the schools they visit, means pupils can relate to them more readily.

The networking events and conferences role models have helped to stage create a sense among role models that they belong to a collective entity or club, which has had a positive impact on retention. Individual role models have also often praised the learning that they have gained from presentations and interaction with students; the work with students has, for example, improved communication skills of some entrepreneurs and their ability to promote and market their business to potential clients.

Source: Arad Consulting, 2007.

The Welsh example demonstrates that there are many entrepreneurs willing to spend time talking about their experiences and motivations, and explain how students could achieve entrepreneurial goals. A survey among the role model entrepreneurs shows that more than two-thirds (65%) of entrepreneurs get involved because they 'feel good about giving something back'. Around a fifth of entrepreneurs (21%) do so because they feel that it is good to be part of a network with a common goal and meet other entrepreneurs. The remaining entrepreneurs get involved because it gives them a chance to reflect on what they have achieved (8%) or because they get paid to do so (6%) (Arad Consulting, 2007). This means that few entrepreneurs are driven by financial goals; most do it to help others or to network with others. Some role models choose not to accept the payment offered, preferring to provide their services for free, even though they are entitled to the payment.

The experience from Wales also demonstrates that the role model approaches need to be tailored to each age group. Older students, such as those in upper secondary level and higher education, have a tendency to ask more questions, especially those relating to the actual business and experiences of being an entrepreneur. In principal this means that older students need more time with the entrepreneur.

Some role models have emphasised the particular sense of reward they have gained from working with academically lower attaining groups of students. They have reported that groups of students who may have difficulties in more traditional subjects tend to respond very positively to the presentations of entrepreneurs and their journeys.

Another rare example of a national approach to career guidance, which seeks to involve entrepreneurs as role models, can be found in France. The French chambers of commerce and industry (CCIs) have been organising guidance nights (*Nuits de l'Orientation*) since 2007 (see Example 3). The goal of guidance nights is to move away from the traditional qualification-centred approach, to one, which focuses on actual occupations and young people's interests instead. The guidance nights evenings are hosted at the weekends for school pupils and students and also their parents. The primary objective is to inform them about of existing occupations and career opportunities, using a variety of media and tools such as round tables, thematic workshops, spaces dedicated to individual counselling, interactive tests, and 'trade dating' opportunities with entrepreneurs and company managers. Entrepreneurship is highlighted as one career opportunity, especially through the involvement of entrepreneurs and business professionals in the events. The approach is also

unique in terms of the level of investment made by employer representatives to allow young people to take part in such activity.

Example 3. **Guidance nights (*Nuits de l'Orientation*), France**

The chambers of commerce and industry (CCIs) in France support the economic development of their regions by providing various services to companies and entrepreneurs. Despite the active role of CCIs in providing services related to guidance and vocational training, there was, until recently, no coherent, coordinated action at national level on career guidance.

In 2006, a consensus was reached among stakeholders nationally, which highlighted the need for much better alignment of the guidance provided to young people with the expectations and needs of both young people and the companies who wished to recruit them. The French education system emphasises qualifications, which can mean that diplomas and training processes often take precedence over the need to prepare students for actual occupational roles. Career guidance in France, therefore, focuses on education, with the result that students do not have the chance to discuss occupations or career opportunities in concrete terms at any point during their school years. Career related choices are also perceived as stressful by young people and can be a source of anxiety. The prospect of failure or 'wasting' one's professional life by making a bad decision can generate a lot of pressure; both for young people and their families.

The idea for guidance nights emerged from a context in which stakeholders had acknowledged the need to strengthen the role of economic actors in the guidance process. This was necessary to bring schools and companies closer together and significantly modify the conditions in which pupils and students get to know and understand different occupations.

Guidance nights are organised in a setting that is easily accessible to young people and their families and takes place on a Friday or Saturday evening (whereas traditional 'job fairs' are usually organised during the week and during working hours). The events aim for an upbeat and relaxed atmosphere, yet one that is also professional. They are held under the slogan: 'guidance without stress'. The notion of a personal journey is at the core of the concept, meaning that the guidance night is only the beginning of a process which will be taken forward after the event. The nights are entirely free for young people and their families.

Activities

The most successful activity of the night, and that which is in highest demand from the public, is known as 'trade dating' – a form of 'speed dating' which provides the opportunity for young people, professionals and entrepreneurs to meet. Trade dating means that young people get some valuable one-to-one time (15 minutes) with entrepreneurs, company managers and business representatives from a variety of fields. Young people ask questions about the career pathways that entrepreneurs have taken to gain a clearer picture about the different career routes available and the day-to-day activities that comprise these different occupations. Short interviews mean that young people can explore several occupations in the course of one evening. Around 60 different occupations are usually represented at each event, and about 1 500 employer representatives are involved in the initiative within one region.

The events are supported by live music and performances from theatre companies; there are games, orientated around guidance, for participants to join in with. Participants also have the opportunity for one-to-one meetings with career counsellors and can obtain reports about different sectors and occupations and participate in workshops and debates.

Outputs and results

All key stakeholders involved in professional guidance, education and training have now joined the CCIs to support these guidance events; and the initiative has grown rapidly as a result. To date, the nights have taken place in 30 different cities and attracted between 600 and 5 000 participants per event. Participation has grown from 3 000 participants in the first year (2007) to 30 000 participants just two years later (2009). In 2010, the events have already attracted more than 50 000 visitors, with 850 occupations being represented and 1 200 guidance professionals, entrepreneurs and business professionals providing support. Participants come from a variety of backgrounds, including many from more marginalised groups of the population. Nearly 40% are upper secondary school students, one third come from lower secondary schools and 13% are higher education students.

A key lesson generated through the dialogue between entrepreneurs and young people is that there are no linear pathways or privileged routes that must be taken to achieve one's career goals, but that pathways can be multiple and sometimes unexpected. Entrepreneurs have all pursued different educational pathways, and may also have experienced failure before achieving their aims. Such exchanges have proven successful in reducing the anxiety that young people can feel about their career choices, and help them to understand that trial and error is inevitably part of the process.

However, the ACFCI is well aware that the goals of the guidance nights must not be over-ambitious. The nights do not aim to resolve all career choice issues in one evening, nor do they represent a kind of 'express' career guidance process. It is simply a catalyst for a process that must be sustained and pursued by the student afterwards.

This approach is unique in many ways; the level of commitment from the chambers of commerce (in financial and human resource terms) is impressive, as is the number of entrepreneurs and other company representatives who volunteer their time free of charge to provide guidance for these young people. The cost of one event is around EUR 20 000-30 000 and it is covered almost in full by the CCIs. Entrepreneurs and other employers have responded to the initiative very well, as they know that finding qualified and motivated workers is a challenge. Raising young people's awareness about career options at an earlier stage in their lives can act to mobilise local resources and support economic development. Another reason for the positive response from the entrepreneurs is that they rarely have the opportunity to talk about their jobs or the skills they have acquired or their professional pathways. These events, therefore, also provide the opportunity for them to reflect on their career journey and achievements at the same time as transferring this knowledge to young people with a genuine desire to learn.

Sources: ACFCI, 2006; ACFCI, 2009.

The French example is also unique in the way it has brought together partners who have not previously worked together on guidance issues. This partnership working is proving invaluable in instigating profound changes in the way in which career guidance is approached in France. The guidance nights have the potential to be a catalyst for change and provide a new approach in the process of career guidance.

Some individual schools in Sweden have embraced the role model approach by involving parents and their companies in the entrepreneurial guidance process (see Example 4). This approach encourages parents and the businesses which they own or work in to become 'mentor companies' for classes or groups of students. They encourage companies to engage in a longer term mentoring process to maximise the impact on both parties. Overall, mentoring examples involving IVET students are relatively rare in Europe, with small initiatives

identified only in Latvia, Lithuania, Romania and Sweden (mostly linked to work placements).

Example 4. **Parents and mentor companies, Sweden**

Parents of students in Fryxellska school in Västerås, Sweden were invited to encourage the companies they worked for to become 'mentor companies' for a class at the school. Companies were grouped to specific subjects according to the sector and markets involved. Students aged between 11 and 16 were engaged in the programme over several years which allowed students to see the progression of projects within companies. Students worked alongside companies on their projects which enabled students to have input into real problems and company activity.

3.1.3. **Job shadowing**

Job shadowing arrangements that involve self-employed individuals and other business owners are another example of enterprise-oriented guidance. Job shadowing is a good opportunity to gain exposure to new careers. In the context of entrepreneurship, it gives students an insight into the working life of a leader, which again helps them to become familiar with the processes involved in running a company. In Luxembourg, such activity is available for the 50 highest achieving students in the country. The Manager for a day is a one-day initiative in Bulgaria where students get to spend a day working with a top manager of a business, and experience the demands of daily business operations. In 2008, over 220 state institutions and leading Bulgarian and international companies and non-governmental organisations and over 1 000 high school students took part in the initiative.

Example 5. **Job shadowing, Norway**

Through Norwegian young enterprise (www.ue.no), a job shadowing programme is run for students aged between 14 and 15. The programme takes place in three stages. Initially students shadow a working family member: this enables the student to gain an insight into the career of someone they know, introducing the student to the working world in a familiar and less intimidating way. Second, the student will shadow someone they do not know, to enable them to gain insight into a career they may not have considered while also improving skills of communication. The final stage is for the student to shadow an older student who has followed the study route that the student is considering. The hope is that this will provide the student with an insight into what those studies may entail.

In addition to the job shadowing, the student undertakes assignments before and after each stage. This ensures that the student considers the job to that they will be undertaking and encourages them to think about the networks, competences, responsibilities that are required. Following completion of each stage, these responses will be reconsidered, allowing the student to reflect on the activities undertaken and the skills they may have learned. This may challenge their preconceived views of the jobs they undertook and careers they explored, and encourage students to look past job titles and positions and potentially consider new or entrepreneurial roles. Also, students who are able to shadow a self-employed businessman/woman or a business owner get a real, direct chance to experience an entrepreneurial career direction.

In Norway, the principles of job shadowing have been used to develop a three-stage process, which takes into consideration the skill and maturity level of students; the arrangement changes as the students get older and more familiar with the world of work (see Example 5).

The Norwegian example reflects also on the importance of a chance for reflection both pre- and post-shadowing, to produce results that have the best chance of long term impact.

Finally, other approaches, such as those related to business competitions, innovation camps and mini-companies are also involving ever greater numbers of entrepreneurs and business professionals. These are discussed further in Chapters 3.3 and 3.4.

3.2. Familiarising students with entrepreneurial principles and thinking

Some entrepreneurship oriented activities introduced by IVET institutions focus on ensuring that students embrace the fundamental principles behind entrepreneurship: initiative, pro-activity, creativity, independence, confidence, innovation and determination. Such activities are intended to stimulate entrepreneurial attitude, rather than emphasise business mechanics like accounting and marketing. It is hoped that students can build a solid foundation for future entrepreneurial learning and activity by understanding and embracing these fundamentals; they build the foundation for acquiring more specific skills and knowledge needed to pursue social or commercial activity. These enterprising principles are also useful skills for employability (useful for any work, any occupation) and for the development of career management skills. For example, creativity does not only help entrepreneurs in their ability to identify and create new products, but also in their ability to find innovative solutions to problems that other entrepreneurs and individuals in their careers and daily life may face.

One example of an initiative that aims to build entrepreneurial characteristics comes from Belgium where some city councils have teamed up with local schools to encourage IVET students to think of possible economic, cultural and social activities and events for their city. This activity is not linked to new business creation as such. Instead it helps to promote basic entrepreneurial thinking through creative thought.

In a similar manner, the Young social innovators programme (YSI) in Ireland gets young people (15-18 years) involved in action which helps improve the lives

of others in their community. It engages thousands of young people from schools of general education, VET and youth services in activity which is youth-led, team-based and action-focused. This is not directly linked to business formation either but helps students to identify and build solutions to problems people face in everyday life. This is the principle on which much of business activity is based; responding to customer needs and wishes.

A similar example can be found in the UK. Cramlington Learning Village is a vocational college in the northeast of England which has run a week-long initiative based on the principles of a socially driven enterprise. The college was keen to help its students form better relationships and play an active part in society, and consequently decided to launch a personal challenge week, when all year nine pupils were given personal challenges designed to include enterprise and to benefit the local community in some way. The week of activities designed to encourage learners to make a positive contribution has had much broader benefits (see Example 6).

Example 6. **Cramlington Learning Village, the UK**

Cramlington Learning Village is a specialist science and vocational college in Northumberland with 2 300 students. The college has been recognised as 'outstanding' by Ofsted (an agency in charge of regulation and inspections) three times in succession.

The college decided to launch a Personal challenge week, when all year nine pupils were given personal challenges designed to include enterprise and to benefit the local community in some way. Pupils were asked to select something in which they were not fully competent but would like to improve: it had to be a real challenge for them. The week was fully inclusive, with all activities funded by the school. Possible activities included:

- creating an allotment as a long-term business venture to supply the school with flowers or vegetables;
- researching and producing a fitness video with advice on exercise and nutrition;
- developing a recycling scheme for the school in conjunction with the local council and producing a recycling promotional stand for use in the community;
- producing a newspaper of the week's activities, plus audio news for the radio station and a TV news programme to be shown on big screens in the school;
- researching and producing a local history film and marketing a DVD of it.

The week culminated in an exhibition day open to the public, where the pupils demonstrated their completed challenges and explained what they were able to do now that they could not do at the start of the week.

The school was delighted to find that the benefits extended beyond helping pupils form relationships and participate in society. The pupils enjoyed the week and engaged well with the activities, developing a range of knowledge, skills and understanding relevant to entrepreneurial activity and working life.

Some VET schools have built multidisciplinary programmes as a way of fostering innovation, teamwork and innovation; the integration of students from different disciplines offers realism and technical knowledge from the other disciplines. In Belgium, joint projects were set up between different subjects with

a focus on entrepreneurship. In one institution a project was established between students on fashion and woodwork courses. The ultimate aim was to stage a fashion show with fashion students responsible for making the clothes and the woodwork students building the catwalk. This project aimed to bring together different ideas and perspectives to develop enterprising capacities.

Some vocational schools have made connections with local primary schools as a way of extending entrepreneurial guidance to students who have not yet started their upper secondary level studies. In Northern Ireland, some students are able to sample opportunities for self-employment through a 'taste and see' programme with local vocational colleges. The programme enables pupils aged 12-13 to attend a taster day of different vocational sectors including bricklaying, media and catering. The hope is that students will gain a more practical idea of the opportunities that different routes of education and self-employment can provide, above and beyond what can be gained through theoretical studies.

Some of the guidance-oriented entrepreneurship initiatives target specific groups of students. Different academic studies have shown that girls have lower self-esteem than boys (e.g. Eccles et al., 1993) and this, together with a range of other factors such as horizontal segregation in education, lack of role models and difficulties in reconciliation of family and work life, has led to there being fewer women than men in leadership positions in both public and private employment. As shown in Chapter 2.2, there are also fewer female entrepreneurs.

Consequently, Young Enterprise Norway is piloting a special leadership programme for girls who have performed particularly well in other enterprise schemes run by the organisation (see Example 7). The aim is that girls will increase their self-awareness and confidence, thereby allowing them to reflect on themselves as potential future leaders.

Example 7. Promoting girl leaders, Norway

Girls and leadership is a two-day coaching programme operated as part of the wider young enterprise scheme run by Young Enterprise Norway. The scheme focuses entirely on girls who are involved in young enterprise and aims to provide girls with the confidence to become entrepreneurs or other leaders following the completion of their studies.

Through the programme, girls attend lectures, group discussions and practical exercises in varying entrepreneurial guises including leadership, awareness, networks and communication. They also have a chance to meet successful female leaders. Looking forward, the scheme may be rolled out nationwide depending on the success of the initial project.

Finally, several studies (e.g. Volkmann, 2009) have showed that interactive, experiential forms of teaching and learning can be particularly appealing for students who do not perform well in academic studies. Some IVET institutions have tried to prevent early school leaving among at-risk groups by connecting the

classroom atmosphere with that of a workplace. In Belgium some IVET institutions have organised classes to teach entrepreneurial values to young male students who are at risk of leaving education, especially those from minority backgrounds. The classes involve the transformation of the classroom into a business, led by the teacher. Students subsequently take on different roles within the 'class/business' to help them understand the value of work.

3.3. Enterprise familiarisation activities

Enterprise familiarisation activities go further by showing how and why businesses operate, and about entrepreneurial practices and environments, by undertaking activities set in enterprise contexts. Three different types have been identified as part of this research: innovation camps, business competitions and other approaches.

3.3.1. Innovation camps

Innovation camps are one of the prime examples of an enterprise-oriented activity which give students a flavour of entrepreneurial processes, challenges and activities, and encourage creativity and innovative thinking. They are facilitated by Ja-Ye branches across Europe and by their central organisation at European level. Innovation camps involve students working on real business challenges in a 24-hour intensive workshop. Students come from schools, colleges and HEIs of both general and vocational orientation though this approach is seen to suit vocational schools in particular as it increases collaboration with companies. Ja-Ye Europe has created a European network of providers of innovation camps, comprising 390 vocational schools and 7 800 vocational school students in Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Greece, Italy, Norway, Portugal, Romania, Slovakia, Spain and Turkey; 600 directly participate in the challenge in each country. The project also involves 390 newly-trained teachers, 390 newly-trained business volunteers, 13 trainers-for-trainers and thousands of parents.

Innovation camps have proved to be incredibly popular among students and businesses alike. There is significant amount anecdotal evidence from a number of different European countries that innovation camps are helping to raise awareness about entrepreneurship as a professional career choice and they are increasing students' interest in other entrepreneurship-oriented activities, such as mini-companies (see Chapter 3.4). They are also increasing companies' interest in such activities, under their corporate social responsibility agenda.

Example 8. Innovation camps

Innovation camps are 24-hour intensive workshops in which students are given a real life business problem and they must prepare a solution or idea to solve that problem within a limited period of time. The camps are often sponsored by private companies (or public sector organisations) that present students with a business or social problem and some background information that will guide their work or help resolve the issue.

The students work on the assignments in groups of three to six students and each group is assigned a space in a conference centre, school, university or a company premises. The groups of students start the work with an ice-breaking/brainstorming session. The team members may not know each other, and have to find out how to work together most efficiently. After the initial ice-breaking session, the students are presented with the challenge. The goal is to find a creative, innovative solution to the challenge, and just 24 hours later present their solution to a jury that selects a winner based on selected criteria.

Many of the companies presenting the challenge are multi-nationals, though many SMEs have also been engaged. The challenge might involve asking students to come up with a marketing strategy for a local museum or a company, or it can be a much broader social issue, such as coming up with an environmentally and socially responsible solution to a problem faced by a company.

Then the teams need to move into the next phase which involves thinking through how to make their idea a reality. They are given access to tools, information and resources and an opportunity to meet representatives of the company who have provided students with the challenge. The representatives may be consulted by the students on technical, marketing or financial questions, or conceptual aspect of their idea. The students sleep at the premises and often work throughout the night.

Teams have to prepare a business concept and make their final presentations to a jury. The jury normally comprises representatives of the company, the school(s), public sector organisations and/or media.

Students enjoy the challenge and the 'buzz' created by the team work and the time pressure. The activity also provides them with intense training on how to work creatively within a team. This helps to develop their interpersonal and problem-solving skills and teach them about work under tight deadlines.

The drawback of this approach is that the short time period does not allow students to gain a real insight into the lifecycle of a business and the opportunities and challenges associated with entrepreneurship. Some parties have raised concerns when mini-companies have been replaced by innovation camps as a less expensive way of providing entrepreneurship education; they should, however, be seen as complementary - something that raises awareness and 'kindles' enthusiasm for education for entrepreneurship – and not something that would replace the in-depth learning experience related to mini-companies.

3.3.2. Business competitions

VET students have more opportunities to participate in business orientated competitions today than ever before. Competitions have become an important element of the entrepreneurship learning agenda and many of them are linked to other entrepreneurial activities, such as mini-companies. Competitions are

organised by individual schools, local, regional and national authorities, international organisations (e.g. Ja-Ye) and media (e.g. newspapers).

Entrepreneurship competitions and awards are based on a common methodology: judging entrants – either individuals or teams – and awarding a prize for the best entry but can be used to achieve a range of aims and objectives among a variety of different target groups. The activities for the participants can also vary, as can the prize awarded. There are also a range of stakeholders which can be engaged in the various stages of running the competition.

Entrepreneurship oriented competitions have a number of benefits for participants. They can develop or improve entrepreneurial/business skills but can also form other skills such as team-working and communication. Depending on how the competition is run, participants may be able to learn from existing businesses/entrepreneurs and there is the chance to win a (generally monetary) prize. Another value lies in the fact that students have the chance to teach one another; some of the most valuable learning may come informally and tacitly, as younger or less experienced students learn by observing and imitating those whose techniques and skills are greater (Volkman et al., 2009). Often, existing entrepreneurs or other relevant representatives of the private sector are involved in judging or supporting participants, presenting an opportunity to establish contacts in the private sector.

Some entrepreneurial competitions are based on a number of stages, as is the case for the Business competition in Hungary, described in Example 9.

Example 9. ***Diákvállalkozás – A versenyről (Business competition), Hungary***

The Business competition is open to secondary school students, including students of VET. The competition has four stages, the first being a test on economic issues that relate to the formation of a business. The second stage is the creation of the company, including the creation of a business idea, a name, slogan and logo. The third stage includes the further development of the business plan, including an explanation of the scope of activities of the business, firm financial planning and a review of the market research and the long term goals of the company. The last stage is the judging.

Source: http://www.diakvallalkozas.hu/content.php?cid=cont_4b90e0c26462b2.30046887 [cited 03.09.2010].

Business competitions can also be used as an incentive for VET students taking part in virtual mini-company programmes. For example, in Bulgaria, the national competition Virtual enterprise is a competition promoted by Junior Achievement and the Ministry of Education, Youth, and Science which gives students aged between 15 and 19 the opportunity to test their business skills. Students are given a task of introducing an innovative product to the market and the one generating the highest possible profit will win.

All students – regardless of whether they win or not in the competition – should receive formal feedback from the judges: what worked, what did not, what needs to be improved (Volkman et al., 2009). This ensures that all participants gain from the experience.

3.3.3. Other approaches

Enterprise familiarisation activities can also be tied into non-school based activities. An interesting example comes from the municipality of Botkyrka in Sweden, which runs a programme called Summer holiday entrepreneurs. It is available to students who have not managed to secure a work placement for the summer months. Participants need to have a business idea (e.g. to sell a product), then the municipality will give them a small amount of money to start their business, from which they will then have to generate their own income.

Within the overall drive to increase entrepreneurial thinking, there is a desire to help students to think about the benefits of running their own business, but also help them recognise the positive impact that enterprising attitudes can have on others and in every area of their own life. This was the motivation behind the Christmas market project set up by the Roskilde Business College in Denmark. The project involved setting up and running a Christmas market for which local enterprises donated (or sold cheaply) Christmas merchandise (European Commission, 2010a). Students were responsible for the entire organisation, which meant that they had to embrace a 'can-do' attitude and had to be very innovative as their budget was limited. The market was very successful, making a profit which the students donated to a charity.

In Iceland, the BYKO project was introduced to encourage creative thinking among IVET students. The project involves students choosing an already existing product and transforming it into a different product that would be marketable (Jónsdóttir, 2009).

3.4. Guiding through business simulation games and exercises

Business simulation games and exercises give young people the opportunity to set up their own company within a protected environment, i.e. their school or a virtual community ⁽¹⁶⁾. The objective is to allow students to develop and take part

⁽¹⁶⁾ Such games are typically known as mini-companies, though many other variations of the name exist.

in real economic activities, albeit on a small-scale, so as to be able realistically to experience how companies operate.

These activities are an important tool in career exploration for all IVET students; they provide an important opportunity to experience entrepreneurial activity and potentially to broaden their career horizons (European Commission, 2005b). Many studies refer to mini-companies as 'the most effective way' of exposing learners (and teachers) to business methods and challenges. They see it as particularly suited to students in vocational education as many VET students prefer active learning rather than sitting in a traditional school environment and passively taking in knowledge.

Mini-companies can be applied in all types of schools and at all levels of education (primary, secondary and tertiary), although most mini-companies are found in upper secondary education, including IVET. In some countries, company programmes mainly take place within the school programme (such as in Austria, Czech Republic, Finland, Ireland and Norway). In others they are outside of normal school hours and the school programme (such as in Belgium (Wallonia), Germany, Estonia and Sweden). In a few Member States, mini-companies can be seen in both settings (*ibid.*).

There are two principal types of mini-company (European Commission, 2005b). First, 'real companies' produce and sell products bringing together groups of students who are then responsible for the whole range of activities linked to the operation of a company: choosing their company's product or service, preparing a business plan, nominating managers, raising capital, developing a marketing strategy, procurement and producing and selling their chosen product/service.

Second, those developed as virtual, fictitious or practice firms to provide a realistic simulation of an economic activity. Mini-companies that are based on a simulation also require groups of students to undertake a wide range of activities that replicate the operations and challenges of a real company, apart from actually producing and selling a product or service. Within this group of mini-companies there are again two different types. First are those that depend heavily on computer simulation, but also involve team work (i.e. for making business decisions) and interaction with actors within and outside of the school environment (i.e. teachers, mentors from the business or local community). Second are those that emulate a real company as realistically as possible, for example by providing students with an office space and the necessary equipment; in this case the only difference between a real mini-company and a virtual mini-company is that no goods or services are produced and no real

currency is exchanged. 'Real' company programmes are less commonly used in IVET than virtual and practice companies.

Examples of different mini-company approaches can be found in Example 10. They show how practice and virtual company programmes are being implemented by vocational schools in practice.

Example 10. **Practical training firms, Lithuania**

The first practical training firm (PTF) was established in Lithuania in 1993 under a joint project of three Danish business colleges and the Lithuanian Ministry of Education, Culture and Science. Consequently, the Lithuanian PTF network is more than 10 years old. Just under 50 practical training firms are currently operating in Lithuania (20 of them are established within IVET institutions). They are used as a practical teaching method in 20 out of 78 IVET establishments.

Practical training firms are companies that imitate activities of genuine companies and are involved in mutual trade with Lithuanian and foreign firms. The aim of a PTF is the development of knowledge and skills in the business field. This includes practical application of theoretical knowledge on marketing, staff management, finances, and bookkeeping, sales, working with suppliers, foreign language and ITC. Students act as business executives and attempt to solve issues that arise in the process and implement their plans and ideas.

The activities of practical training firms are very similar to the activities of genuine businesses. They have to comply with national laws. The only difference is that there are no real products (since they exist only on paper) and money is not real (it exists only in the records of a virtual bank, etc.).

Example 11. **Virtual business game, the Netherlands**

In 2004, Groningen University together with ID Media developed an educational internet game for students in 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 piloted in 2005 by five schools and can now be used by all schools in the country. Currently around 80 schools are registered and last year 5 000 people visited the site where they can play the demo-version of the game.

Source: McCoshan et al., 2010.

Activities linked to mini-company programmes generally take place once or twice a week, for one to two hours per lesson. Some programmes last for four to five months (for example, in Estonia and Lithuania) while others run for only a few weeks (for example, in Ireland, Hungary and the UK) (European Commission, 2005b). These shorter versions of the programme are often run as intensive options to reach as many students as possible as several programmes can be run through the academic year.

Mini-company programmes are generally offered through external providers, often non-governmental organisations and charities ⁽¹⁷⁾. In Europe, the main provider of these programmes is JA-YE Europe, which is active in 27 out of 30

⁽¹⁷⁾ For further information, please see Section 2.5.1.

study countries ⁽¹⁸⁾. In 2005, the European Commission recognised JA-YE's mini-company programme as a Best practice in entrepreneurship education. Another organisation offering similar services is EuroPEN International, a worldwide network of virtual companies. They run about 5 500 virtual practice firms around the world out of which nearly nine out of 10 (4 864) are in Europe ⁽¹⁹⁾.

Earlier studies show that during the academic year 2003-04 in most European countries less than 1% of upper secondary school students were involved in mini-company programmes. Only five countries recorded levels above 2%: Austria, Ireland, Lithuania, Norway and the UK (European Commission, 2005b). In most countries the participation rate of secondary schools in mini-company programmes is between 3% and 15%. In three countries estimates recorded participation rates of 30%: Belgium, Luxembourg and Norway. The highest levels of participation can be seen in Ireland and the UK; estimates suggest that between 40% and 50% of all secondary schools participate in student company activities.

However, our research suggests that participation of both IVET students and schools in mini-company programmes is increasing. For example, 20 out of 78 Lithuanian IVET establishments operate the Practical training firm programme (see Example 10). In Norway every fifth upper secondary student engages in mini-company activities; around two-thirds come from vocationally oriented schools. In Denmark 79 out of 115 VET schools are involved. In Sweden, the mini-company programme is available in about 500 IVET institutions, and they are supported by 2 000 teachers and 6 600 advisers.

Participation in a mini-company programme has the potential to equip young people with a full-range of skills and competences that can, in turn, be transferred to both their private and professional lives. Evidence strongly suggests that mini-companies play an important role in developing young people's entrepreneurial mindsets, knowledge, understanding and skills. For many, this will be their first taste of entrepreneurial activity and can ultimately broaden their horizons to include the possibility of starting-up their own business.

The skills and competences gained through mini-company programmes are normally grouped into two distinct but interconnected categories, encompassing transversal competences and business (entrepreneurial) skills. In addition to impact on transversal, personal and business competences, mini-companies

⁽¹⁸⁾ Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Portugal, Romania, Slovakia, Spain, Sweden and the United Kingdom.

⁽¹⁹⁾ Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Italy, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Spain, Sweden and the UK.

allow students to begin to think actively about, and decide on, their future education or employment pathway. The guidance value of mini-companies is explored further in Example 12.

Example 12. **Guidance value of mini-companies**

Mini-company programmes have the potential to bring benefits to participants that go beyond transversal and business competences. They can improve the career management skills of young people in the following ways.

Raise awareness of entrepreneurship as a career option: mini-companies reach young people who may not have thought about entrepreneurship as a career path. For some young people this is the first opportunity they have to experience the world of business and to play a role in setting-up a real company.

Gain understanding of business life: the programmes provide a safe and risk-free way of experiencing the full business life-cycle, from start-up to liquidation. This means that if a young person decides to become an entrepreneur and set up their own business they already have a generic understanding of what to do, what obstacles to avoid and how, what they can expect, etc. Mini-company programme can give a 'trial/practice run'.

Create networks of contacts: mini-companies can give unique access to external business mentors/advisers, networking opportunities and advice who can provide practical first-hand knowledge, know-how and experience of entrepreneurship. JA-YE evaluations have shown that the some of the people involved in mini-company programmes keep in touch with their business counsellors even after the programme has finished.

Increase self-awareness: mini-companies have the potential of increasing young people's self-awareness, especially in relation to the skills required to survive and succeed in a challenging/changing work environment.

Build confidence: the programmes have the potential of helping young people to take responsibility for their own career and personal development as they gain experience of doing things by themselves, with guidance from teachers and professionals, rather than being 'told' to do certain tasks and assignments.

Source: European Commission, 2005b.

Several evaluations have been carried out on the impact of mini-company programmes on participants' careers; many (both European and US studies) have concluded that mini-company alumni are twice as likely to pursue their own business venture as non-alumni. In the UK a survey found that 14% of programme alumni were running their own business in comparison to 7% of non-alumni (Young Enterprise United Kingdom). In 2009, Junior Achievement Worldwide (JA Worldwide) launched a retrospective study covering 281 individuals who formerly participated in their programmes. The results indicated that 18% of respondents owned their own business at the time of completing the survey, in contrast to the US national average of 9.6% (Ja Worldwide, 2009).

Ja-Ye evaluation of 1 238 mini-company participants from Belgium, Denmark, Estonia, Finland, Norway, Romania and Slovakia concluded that 15% of former participants between the ages of 20 and 29 had started their own businesses and 85% are still running their company (Ja-Ye Europe, 2007). A

further 36% of the respondents planned to establish one within the next three years.

Other studies have provided similar conclusions. A survey conducted in Sweden on students who had participated in the Young Enterprise mini-company programme since 1980 recorded that 7% of students were still running a company and a further 13 % had at some stage started their own company (Ung Företagsamhet, 2002).

A study of Norway (Johansen and Clausen, 2009) concluded that participation in mini-company activities has a more significant impact on career choices than other variables (e.g. gender, immigrant background, parents' education and academic skills).

Strong links with the business sector and the local community are critical to mini-companies. They play a role as sponsors (especially in many Eastern European countries) and they ensure access to mentors and advisers with first-hand knowledge of the business world. Companies are interested in participating as it gives them a platform to be seen engaging with young people in educational activities.

3.5. Training and supporting teachers and guidance professionals

Teachers and guidance professionals have a critical role to play in the entrepreneurial activities of vocational schools (European Commission, 2010a; McCoshan, 2010; Volkmann et al., 2009). However, one central weakness in the system for entrepreneurship education in Europe is the apparent inconsistency in the competence and ability of teachers delivering entrepreneurship education (European Commission, 2010a). The main obstacle facing teachers is their lack of practical experience of entrepreneurship. While it is the case that most countries offer teachers some level of training on entrepreneurship, this is generally provided by external organisations and delivered on an ad-hoc basis, not usually as part of a coherent, systematic approach to entrepreneurship training delivery (ibid.).

Our European survey of policy-makers and practitioners with a guidance remit also concluded that guidance professionals in most European countries lack the necessary skills to offer support to students interested in becoming entrepreneurs. Respondents believed that guidance practitioners have limited experience of working with students interested in becoming entrepreneurs and with companies. Further, some respondents identified that there is a lack of

awareness of business and start-up support for enterprises and a lack of awareness of entrepreneurship as a career option.

Consequently, there is a wide recognition of the need for effective training, guidance and support methods for teachers and guidance professionals. It is essential that those involved in career guidance and entrepreneurship education are fully trained and supported and have access to guidance materials to improve training. In line with the increased emphasis on the importance of practical entrepreneurial skills of young people, there is a need to equip teachers with the necessary competences to deliver this type of practical learning.

Generally speaking, there are a range of strategies in place that address identified training and support needs of VET teachers and guidance counsellors in the Member States. These strategies differ between countries in terms of their delivery and content; some focus on the continuing training of teachers while others place emphasis on skills development at the initial training level.

3.5.1. Continuing professional development courses

Support for IVET teachers in entrepreneurship is most common within continuing professional development (CPD). The use of CPD is most prominent due to fact that the subject matter changes with the economic climate and there is a frequent need to update skills and knowledge. Examples of continuing training opportunities for VET teachers were found in Bulgaria, Hungary, Iceland, Luxembourg, Netherlands, Romania, Slovenia, Spain and Sweden. As an example, the Hungarian National Institute of Vocational and Adult Education (NSZI), which is an independent research and policy body, provides a course on teaching entrepreneurship for VET teachers. The course covers several subject areas including entrepreneurial competences, the development of business plans and the use of kinaesthetic teaching pedagogies. Such courses are also available in Spain, where courses designed specifically for VET teachers include development of transversal skills alongside entrepreneurship education. In the UK (Northern Ireland) there are plans to introduce policies to develop the knowledge and skills of careers advisers to promote entrepreneurship.

A good example of a training programme on entrepreneurship for guidance professionals and school teachers can be found from the municipality of Botkyrka in Sweden: it is one of the few examples where centrally coordinated training on entrepreneurship is provided to both guidance professionals and teachers. Although similar initiatives have been introduced in other parts of the country, the Botkyrka example differs from others in that it is centrally coordinated by the municipality authorities, increasing the number of schools that the programme can reach.

Example 13. **Entrepreneurship training for teachers and guidance counsellors, Sweden**

Botkyrka is a municipality of Stockholm County, situated between the city of Stockholm and Södertälje. It is known for its relatively young and culturally and ethnically diverse population.

Rationale

Unemployment among young people of immigrant background in the municipality is relatively high. This became the driving force behind efforts to promote self-employment for young people in the municipality, to increase their employment opportunities. In 2006, the municipality introduced a training programme on teaching entrepreneurship for teachers and guidance professionals.

The programme targets teachers and career/guidance counsellors at all levels of education (from primary schools to higher education) with the aim of informing and familiarising them with the idea of entrepreneurship. In training teachers and guidance professionals, the idea is to reach a large number of students.

Programme participants include principals, vice-principals, teachers and career guidance professionals. They attend four all-day sessions which are usually held in August, October, February and May. The organisers try to maximise the benefit of the programme for participants by spreading the sessions throughout the school-year, giving the participants the opportunity to see how the skills they develop in each session apply to their work at school.

All teachers and guidance professionals in the municipality are eligible to attend and their participation is voluntary. The idea of making attendance compulsory was rejected as it was thought to be counterproductive. Instead, the municipality tries to increase the number of participants through word-of-mouth; by ensuring that the quality of teaching is high and the course gains a good reputation in schools.

Programme content

On day one, participants analyse the concept of entrepreneurship. Group discussions encourage participants to challenge the traditionally held view that entrepreneurship is only linked to business start-ups. This is because the organisers want teachers and guidance professional to gain a broader understanding of entrepreneurship as innovation, creative thinking and problem-solving.

In following sessions participants analyse academic articles on entrepreneurship and explore academic debates. These articles list the benefits of entrepreneurship for the local and national economy, explore the skills and competences that are common for many successful entrepreneurs and identify technicalities and other issues related to business start-ups. Participants also learn how they can help students generate a business plan, market a product, manage a company's finances, raise funds for a new business, and understand the legal aspects of business start-ups (e.g. intellectual property law).

In the last session, participants make an assessment of the programme and discuss how the training would affect the support they provide to students in coming academic years. Theoretical discussions and practical advice are complemented by a practical exercise undertaken by participants.

No formal evaluations of the training programme have undertaken but anecdotal evidence from the participants show that the response has been overwhelmingly positive and the number of participants continues to grow.

The potential benefits of training opportunities like this are diverse. In the case of Botkyrka, three clear benefits have been identified by the participants themselves:

- the participants feel that they are in a better position to support students who want to set up their own business. They have a better technical understanding, which helps to support students who need to write a business plan, do market research about a product, or identify funding sources. They also find themselves in a better position to give students initial advice about how to manage finances, how to build networks of contacts with local entrepreneurs and how to utilise business support structures;

- guidance professionals feel more confident to talk about entrepreneurship as a career option to students who have not considered it before;
- training on entrepreneurship can also give guidance professionals and teachers the ability to help students develop transferable competences which are not only linked to entrepreneurship but can also help to improve their employability more generally. Entrepreneurial skills such as creative thinking, innovation, networking and fund-raising can be applied to a number of career choices which differ from typical employee-focused paths.

Training delivered by someone from the business world is another CPD method used. In Estonia, training sessions and events delivered by business professionals are relatively common and frequently involve entrepreneurs. Such events are most common during a dedicated 'enterprise week' that takes place annually in October.

3.5.2. Events and seminars

Besides training courses, there are entrepreneurship-oriented events geared towards delivering continuing professional development (CPD) which take place on an annual or multi annual basis. These events take a number of different formats, such as seminars or workshops. Examples of this type of interventions were found in Belgium (Flanders and Wallonia), Cyprus, Denmark, Norway and Malta. In Cyprus all VET teachers must attend seminars, organised by the Cyprus Pedagogical Institute, on the teaching of entrepreneurship. There are also voluntary seminars for VET teachers that are already successfully delivering entrepreneurship education. In Hungary, the Young Enterprise organisation has developed a teachers' club. The club functions as a network of entrepreneurship teachers and hosts events such as talks and lectures, demonstration lessons and informal discussions. These events give teachers the opportunity to meet and compare experiences and good practice in the teaching of entrepreneurship. The European Business Association and the Shell Foundation for entrepreneurship also provide professional training for guidance practitioners in Hungary.

3.5.3. Placement schemes

There are various programmes which enable teachers to spend a specified period of time within a chosen industry to gain direct and practical experience of the business and entrepreneurial world. These placement programmes exist in France, Cyprus and the UK (Northern Ireland and Scotland). In France, the placement activities involve the head teachers and teachers of identified schools spending a week in the chamber of commerce. They subsequently meet with companies and spend three days in those companies, familiarising themselves

with the company itself and the wider industry. However, these types of activity tend to be relatively small in number and locally-focused; they are not part of a national level programme.

3.5.4. Resource materials

Tailored resource materials are a key support tool for teachers. There are a range of resources which have been developed across Member States to support entrepreneurship teaching. These resources include online tools, printed materials and interactive materials: they can be found in Denmark, Iceland, Malta, Norway, Romania, Slovakia, Slovenia, Spain, Sweden and the UK (Wales). The use of resources is effective as they can reach many people, it is less time consuming and less costs are associated than with training, i.e. no time off is required for teachers. However, this form of support is less personal and less interactive.

The Danish Institute for Educational Training of Vocational Teachers (DEL) has developed an entrepreneurship portal for the education sector and this specifically focuses on VET. The portal contains examples of educational tools, guidance on forming partnerships and working effectively with enterprises. Information on establishing businesses is also available. From Andalucía, Spain, there is an example of a regional project that resulted in development of a teaching guide on entrepreneurship for teachers and guidance counsellors (see Example 14).

Example 14. Entrepreneurship teaching materials in Andalucía, Spain

The Andalusian Association of Social Economy Education Centres (ACES) developed a project that was financed by Cepes Andalucía and the Andalusian Government. The project developed and introduced teaching materials designed for teachers and vocational counsellors operating at all levels of education, including VET.

The teaching material consists of two main tools:

- a teaching guide for teachers and vocational counsellors, available in English and with further information on a CD ROM (comprising a collection of legislative and bibliographical references, a schematic presentation of each unit, case studies and tests). The teaching guide is structured in six teaching units: a) values in the social economy: the cooperative experience; b) collective self-employment: the range of models; c) the democratic organisation of social economy structures: social functioning; d) the importance of people in the social economy; e) the economical and financial management of social economy enterprises; and f) the social economy in Andalusia: history and socio-economic relevance;
- student material, including theoretical knowledge for each teaching unit, a bibliography, and assessment questionnaires.

The teaching material aims to raise student awareness of self-employment as a career option and to encourage entrepreneurial culture more generally. Around 5 000 copies of the teaching material were distributed free of charge.

3.5.5. Initial teacher training

Fewer examples of policies and practices to strengthen the initial training of VET teachers in terms of entrepreneurship were identified. It is, however, embedded in initial teacher training in Cyprus, Finland, France, Iceland, Norway and Sweden. A new method of teacher training was introduced in 2007 in France and from this point onwards, teachers have been required to have experience of the world of enterprise. Individuals training to be teachers are obliged to complete an internship of at least three weeks in a company as part of their training. After getting a job in a vocational education institution (*lycée professionnel*), teachers also have to complete another internship of three weeks in a company. This internship focuses on links between school and enterprise, and ends with the 'design of pedagogical tools' (European Commission, 2010a).

3.6. Summary assessment of the role of guidance in IVET

3.6.1. General assessment

This chapter has indicated that a growing number of individual schools and colleges of initial vocational education and training across Europe are embracing the concept that the entrepreneurial aspirations of young people can be influenced. Such institutions are embracing the notion that entrepreneurial skills and abilities can be developed through education, learning-by-doing and familiarisation initiatives. Entrepreneurship is not solely about business skills or starting new ventures, but also a way of thinking. It has been acknowledged that the entrepreneurship agenda is particularly pertinent for vocational education, as many vocational occupations have high proportions of self-employment. Further, there is a great deal of excitement among many vocational schools across Europe about entrepreneurship.

This chapter has shown that entrepreneurship-oriented guidance in IVET can play a critical role, through making young people more aware of their entrepreneurial attributes and skills and encouraging them to see entrepreneurship as an option for professional life. There are, however, great differences in the extent to which individual schools, colleges and countries are taking entrepreneurship forward, and how much they are supported in these efforts by authorities and companies/entrepreneurs themselves. While, in some countries, guidance based interventions are embedded in the curriculum, in others they depend on the enthusiasm, skills and connections of individual

teachers. Vocational schools in many countries do not have enough resources to help students understand the facts related to entrepreneurship.

The link between guidance and entrepreneurship is also poorly presented in VET policies across Europe.

3.6.2. Formal guidance services

Guidance on the entrepreneurship agenda of vocational schools is evident in a number of different ways and the role of formal career guidance services is not as strong as that of non-formal guidance.

Guidance professionals in many countries and schools are involved in producing material on entrepreneurship, arranging work placements and visits, and sometimes in the development, or implementation, of entrepreneurship education opportunities. However, in many cases the involvement of guidance professionals is ad-hoc and they typically play a supporting, rather than leading, role.

The study demonstrates that entrepreneurship is not covered by guidance services in some countries/IVET institutions because many career services focus on giving advice on employment and education opportunities, rather than on business creation. In some cases, there is a lack of policy on promoting entrepreneurship in vocational education while in others, this is tied to the lack of curricula-based career guidance for IVET students. Studies indicate that, in many European countries, career guidance tends to be more extensively provided in academic rather than in vocational programmes (Watts, 2009), although self-employment is the primary employment option for some VET students. Consequently, elements of career guidance within vocational programmes need to pay attention to specific career paths within the occupations that the programme is designed to lead to (*ibid.*), including self-employment and other forms of entrepreneurship.

There is also a great degree of consensus among stakeholders from the Member States that many guidance practitioners working in IVET institutions do not have the necessary competences to offer the support required by students who are interested in becoming entrepreneurs, mainly because of limited experience of working with students interested in becoming entrepreneurs. There are also relatively few training programmes that seek to develop the entrepreneurial skills of guidance professionals; instead, most opportunities are aimed at VET teachers. Guidance professionals could benefit from targeted training programmes.

3.6.3. Non-formal guidance

The current impact of non-formal guidance methods on entrepreneurship agendas in VET schools seems to be much greater than the impact of formal guidance services. The providers of non-formal guidance are typically role models and other entrepreneurs and people from the business world, rather than teachers and guidance practitioners.

The chapter showed that involving entrepreneurs in the guidance process itself is one of the most effective ways of helping students to understand what a career as an entrepreneur means. The study countries have responded to this demand by creating opportunities for students to shadow entrepreneurs and undertake work placements, and by supporting role model initiatives. Nevertheless, it was found that too few placement and shadowing schemes target entrepreneurs themselves, instead focusing on employers more generally. Some schools and countries are, however, making a conscious effort to involve more self-employed people and business owners, especially those involving students from sectors characterised by high proportions of self-employment. Excellent examples of such approaches were found in Ireland France, and Malta.

Role models underpin most successful guidance-based interventions in this field. However, these are too few and far between, despite their benefits being clear. Entrepreneurs' realistic accounts of the career journey they have taken make a big impression on students and suggest a clear impact in terms of 'enthusing' them and overcoming stereotypical perceptions of entrepreneurs. Role models have been particularly well received by groups of students with lower levels of educational attainment, who tend to respond very positively to the presentations of entrepreneurs and their journeys. Role models themselves have gained from the experience by learning from presentations and interaction with students, and the activity has also helped them to network with their peers.

Practical ways of learning are changing the role of teachers in VET. Their role is to act as a facilitator, to provide students with the necessary guidance to develop their own ideas and to take responsibility for their own actions. This, however, stresses the need for effective training, guidance and support for teachers delivering entrepreneurship learning.

3.6.4. Guidance building entrepreneurial foundations and skills

Guidance in initial VET can also play a role in building foundations for entrepreneurial activity. These foundations can be built through enhancing student understanding of the fundamental ideas associated with entrepreneurship, such as a sense of initiative, confidence and a 'can-do'

attitude. They give a taste of a life as an entrepreneur without going deep into 'business mechanics'.

Innovation camps and a range of different mini-company approaches go much deeper into familiarising students with the enterprise concept; they allow students to experience how companies are actually launched and operated. It is increasingly common to organise business plan/idea competitions alongside both innovation camps and mini-company programmes. Competitions provide an important goal (motivation) for young people taking part in the programmes, but they also raise the profile of the activities, increasing media interest. This, in turn, increases the commitment of the private sector.

Private sector involvement is crucial for both programmes, especially in Eastern European countries where the government contribution to such activities is far less than in many Western European countries, Norway is one of the leading countries where the government is providing more significant levels of support for activities in this field. The role of the private sector is imperative in terms of providing sponsorship but also through the unpaid, non-formal guidance they provide for young people taking part in the programmes. Direct financial benefits are not a driver for most companies as much as being seen as a partner in the initiative; companies 'want to be seen'. To keep entrepreneurs and the private sector involved, the programmes must also remain practical and action-oriented; private sector interest tends to decline when programmes become too 'academic'.

Mini-companies are one of the most researched elements of entrepreneurship activity in IVET, with the business start-up rate of mini-company participants being typically twice as high as the rate of non-participants. Studies all across the world from the US to Western and Eastern Europe show similar results, demonstrating that it is an approach that works regardless of the cultural or economic context. This is also where international organisations such as Ja-Ye and EuroPEN play a pivotal role.

There is also anecdotal evidence to suggest that many under-achieving students excel in mini-company programmes. They discover that while they may not achieve high grades in academic subjects, they may do extremely well in practical assignments such as sales. Often these students do not see a connection between the required academic curriculum and what they wish to discover about the workplace, and they would rather learn about earning a living and making money. Mini-companies provide them with an opportunity to broaden their horizons and allow them to develop skills and knowledge which they may not otherwise have been able to develop. They may even open up new career pathways and help build constructive team and social relationships.

3.6.5. Opportunities for the future

This study has also shown that entrepreneurship driven by socially and environmentally responsible considerations is particularly popular among young students; the research implies that young people are increasingly driven by 'blue' (socially responsible) and 'green' (environmentally responsible) entrepreneurship. This creates a significant opportunity for further development of entrepreneurship among this target group.

At the same time, it is important to avoid creating a false dichotomy between 'socially responsible' and 'socially irresponsible' enterprise. Instead, entrepreneurship-related interventions should send the message that all forms of entrepreneurial activity can be socially responsible.

CHAPTER 4

Entrepreneurial guidance in higher education

Guidance needs and requirements change as students mature and attain higher levels of education. By the time young people leave secondary school and enter higher education, they need entrepreneurial learning and guidance that is more sophisticated and diverse than the support offered at upper secondary level. Higher education institutions (HEIs) in Europe have a particularly important role in supporting students in their efforts to establish and run potential high-growth companies that are built around innovation and scientific research.

HEIs across Europe are starting to respond to this demand for entrepreneurship-oriented guidance and other support, though to a varying degree. While mainstream guidance approaches are still used, many HEIs are finding that many of the new, innovative and student-focused approaches to guidance are having a real impact on the entrepreneurial aspirations of students, participation rates in entrepreneurship education, and enterprise start-up rates. Undoubtedly, the degree to which guidance supports the entrepreneurial agenda of HEIs varies from one country to another as well as between HEIs. Differences in approaches can be detected also between vocational and academically oriented HEIs.

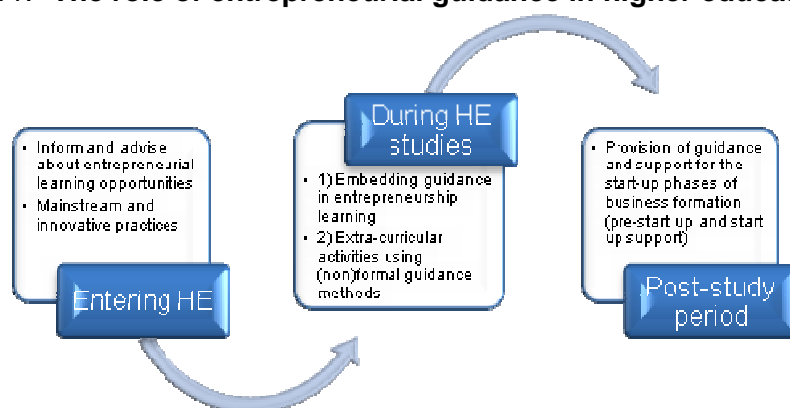
This chapter aims to illustrate in practical ways some of the mainstream and more innovative approaches to entrepreneurship-oriented guidance in Europe: it does not cover all practices in Europe but sheds light on some successful ones. The overall goal is to illustrate how guidance is being utilised by HEIs in Europe as a tool to foster entrepreneurial aspirations, to encourage participation in entrepreneurial learning and to support the entrepreneurial efforts of students.

Our research shows that guidance has a role to play in three different stages of student life in higher education (see Figure 11):

- (a) entering higher education: guidance plays a pivotal role in guiding young people into entrepreneurial learning opportunities offered by HEIs. HEIs use innovative guidance based approaches to raise awareness about entrepreneurship, to engage young people and to promote the entrepreneurship learning opportunities offered by the institution. This is in addition to standard methods of information-dissemination through course brochures and online information hubs;

- (b) during studies:
- (i) more HEIs are incorporating guidance into entrepreneurial learning opportunities in higher education to shift the focus of entrepreneurship education from theory to practical activity. This can help to steer the entrepreneurial career path of young people in a more authentic and inspiring manner than theory-based approaches;
 - (ii) HEIs are increasingly providing entrepreneurial activities as part of their extra-curricular offer. Such activities enable students to develop their own ideas, build self-confidence and guide them in the early stages of their entrepreneurial careers. Many of such activities therefore rely on non-formal guidance methods;
- (c) post-study period/enterprise start-up phase: HEIs provide guidance and other support for the start-up phases of business formation.

Figure 11. **The role of entrepreneurial guidance in higher education**



The section has been grouped into four categories identified above:

- guiding students into entrepreneurial learning opportunities (4.1);
- embedding guidance in entrepreneurship education (4.2);
- encouraging entrepreneurial activity in students (4.3);
- provision of enterprise start-up support for students (4.4).

4.1. Guiding students into entrepreneurial learning opportunities

It is widely recognised that HE students across Europe need more opportunities to participate in entrepreneurship education, and that more work needs to be carried out to raise awareness of such learning opportunities among prospective

and current students (e.g. European Commission, 2006a; European Commission, 2008a; Herrman, 2008; Potter, 2008; Volkmann et al., 2009). Guidance has an important role to play in ensuring that young people are aware of the entrepreneurial learning opportunities offered by HEIs, and in helping students to identify which of the opportunities is appropriate for them.

This study has shown that HEIs typically use four different channels for informing and guiding students into entrepreneurial learning: mainstream information and guidance channels, such as prospectuses, recruitment campaigns and other mainstream activities of careers services; student ambassadors; student entrepreneur clubs; and general awareness-raising activities. These are discussed more detail in Chapter 4.1.1.

4.1.1. Mainstream information and guidance channels

HEIs promote their entrepreneurship education offer to several different types of student: both prospective and current undergraduate and postgraduate students, and professionals interested in returning to learning or setting up their own business. The method of engagement varies for each of these with mainstream channels primarily used to guide undergraduate students into entrepreneurship learning opportunities. Channels include the distribution of course prospectuses, information and recruitment campaigns, student fairs, open and taster days, 'master classes', and other events with local schools and colleges, as well as websites and posters. The online survey (see 1.4. Methodology) carried out among policy-makers and practitioners from the field of guidance in Europe revealed that printed and digital information and guidance on becoming an entrepreneur remain the most commonly used methods of disseminating information. HEI career services have a central role in the process of informing and advising prospective students about education and training opportunities, including courses and activities on entrepreneurship.

For other target students, one-to-one and group meetings with the prospective students are more commonly utilised. Those returning to learning are often steered towards entrepreneurial learning by training and guidance professionals within organisations such as the chamber of commerce, associations representing entrepreneurs and the public employment service (PES). Websites of such organisations are also used to a greater degree than in the case of undergraduate students. As many entrepreneurship courses are delivered in English, especially at a master degree level, a growing number of European universities have also widened their target group to include prospective foreign students from Europe and beyond.

Example 15. Newcastle University, the UK

Newcastle University (NU) is a major research-intensive university located in Newcastle upon Tyne in the north-east of England. It has a core population of around 18 000 students.

The university is one of a number of the UK academic institutions which have integrated an entrepreneurial development unit into their careers services. Even though similar services are offered by other universities in the country, the scale of support provided to students at Newcastle distinguishes it from others.

The aim of having the unit and careers service under the same roof is to strengthen the students' general (e.g. innovation, creativity and adaptability) and technical (e.g. business planning, market awareness, understanding of regulations and legislation) entrepreneurial skills. By 'mainstreaming' entrepreneurial skills – ensuring that all students have the chance to develop or improve their entrepreneurial skills, such as creativity and a sense of initiative– the objective is to widen the career prospects of university students and graduates, and improve employability.

To achieve this, the unit organises entrepreneurial activities in three main areas:

- awareness-raising activities (e.g. business idea competitions and networking events);
- education and training on entrepreneurship (e.g. a university enterprise programme and academic modules);
- pre- and post-start-up business support (e.g. online tests, mentoring, one-to-one meetings with business advisers and entrepreneurs in residence).

All full-time and part-time students and graduates of the university are eligible to take part in the unit's services as well as non-Newcastle University graduates who fulfil certain predefined criteria and seek to develop a business idea. By organising a range of different activities and ensuring that all students of the university have the opportunity to access these, the unit seeks to attract a large number of students, not only the ones who are ready to start their own business.

The unit provides services to approximately 10% of the student population (around 1 800 students) each year. In the past the, largest number of students attended awareness-raising activities and only around 10% (or 180 students) would participate in enterprise training. Even fewer (approximately 18 students) would move on and start-up their business. More recently, it has been noticed that there is a change in attendance rates for the unit's activities. The number of students who attend awareness raising activities has fallen to approximately 1 000 students per year, and the number of students who receive training has significantly increased, reaching about 800 every year. A possible explanation for the change is that students are now more aware of entrepreneurship as a career option and are keen to develop their entrepreneurial skills and competences. The number of students who receive business support has also significantly increased, and it is currently around 80. Finally, each year 25 to 30 students start a new business with the support of the unit. New businesses often involve more than one student.

Ensuring that the staff at careers services of HEIs have expertise in entrepreneurship is one way of making sure that prospective and current students are informed about available enterprise support and related learning opportunities. At Newcastle University in the UK, this has been arranged by integrating the enterprise support unit with the career service offer of the university (see Example 15). This change was prompted by an employer survey conducted by the careers service; the findings suggested that new business creation is vital to the local economy and that employers value entrepreneurial skills and are more likely to employ students who have developed these skills and demonstrate an entrepreneurial spirit. The members of the enterprise team at the university realised that enterprise as a means of living, working and

learning needed to be mainstreamed. This led to the establishment of the entrepreneurial development unit in the careers service of the university.

4.1.2. Student ambassadors

Another innovative method used by European HEIs to guide students and other young people into entrepreneurial learning is the peer-to-peer method. Many HEIs employ student ambassadors on a voluntary or paid basis to inform and advise other students about entrepreneurship courses available. This form of guidance has two advantages as it utilises the power of recommendation: students are more likely to relate to, and in some cases trust, another student than a senior or another outsider; and the information is more likely to be based on the experience of a former attendee rather than someone who has had no experience of the course. A further advantage is that student ambassadors have the potential to reach students who do not tend to use the careers services or who have not considered entrepreneurial studies or a career in this field; instead information can be passed from one student to another in an informal manner.

Example 16. Students ambassadors of the Norwegian entrepreneurship programme

The Norwegian entrepreneurship programme (*Gründerskolen*) is a joint programme offered by all seven universities and most university colleges in Norway. The programme consists of three parts: an introductory course on entrepreneurship that is run within all the participating universities and university colleges; a three-month internship in a start-up company abroad; and evening classes in partner universities abroad. It is offered to students who have completed their bachelor degree and it can be attended on a full-time or part-time basis (five and nine months respectively).

The programme uses a variety of traditional recruitment methods to engage students on the programme. Information is disseminated through posters, brochures and information events. However, about 70-80% of students who participate in the programme have heard about it from students who previously completed the programme; this is down to the student ambassador scheme.

The ambassadors are students who have just finished the course themselves, normally at the end of August when the participants return from their placement abroad. The ambassadors are recruited to promote the programme mainly during September and October as the closing date for the applications is in October. Recent attendees are mainly used as the programme coordinators want to tap into the enthusiasm and motivation of the students who have just participated in the programme.

At least one student ambassador is active in each university, though some of the larger universities have up to three ambassadors. They are paid for their work on an hourly basis. Each ambassador is given the freedom to plan and choose the most appropriate information and engagement method for their university/college. They submit a plan to the programme coordinators in Oslo together with an indication of the time required to carry out the work. The time spent on guidance activities ranges from 10 to 100 hours per ambassador. The ambassadors typically collaborate with lecturers to organise time slots at the beginning or end of lectures to talk to classes of students targeted by the programme. They give information about the content of the programme and explain what their own personal experience was like. They may also have a stand at different events or display posters about the programme. Many ambassadors seek to stimulate interest through new social media sites (which have proved to be another useful method) or find other ways of speaking to students about the programme.

HEIs using this guidance method employ either former students of the entrepreneurial courses or other students at the university. The entrepreneurial development unit of the career services department at Newcastle University runs an intern scheme to raise the profile of entrepreneurship. Three student interns are hired every year on a part-time basis to inform their peers about the benefits of entrepreneurial learning and skills and the training and support services offered by the enterprise unit. In Norway, the national entrepreneurship programme, which involves all Norwegian universities and most university colleges, also runs a student ambassador programme. Former students are recruited to promote the entrepreneurship programme; this has proven to be a successful way of recruiting new students as 70-80% of course attendees learn about the course from students who previously completed the programme (see Example 16).

4.1.3. Student-led enterprise clubs

Another peer-to-peer method used by HEIs is the student-led enterprise club. Such clubs are established by universities in a range of countries, including Belgium, Denmark, Spain and France. Enterprise clubs provide students with the opportunity to understand what it means to be an entrepreneur and support access to entrepreneurship training. In Belgium the FREE Foundation and the non-profit organisation *Les Jeunes Entreprises* established 11 student entrepreneur clubs across HEIs. Currently, some 500 students are members of these clubs, organising entrepreneurship activities for thousands of students in different universities (European Commission, 2008a).

The student entrepreneur club at the University of Navarra in Spain is a good example of the way in which student-led clubs are guiding HE students into entrepreneurial learning (see Example 17). The club provides information to the university's students through blogs, social and professional networking sites and via word-of-mouth, in addition to traditional information tools. According to the leaders of the club, engaging with students when they first join the university (for example at open days, induction fairs, etc.) is the best method for reaching a wide student population.

Example 17. **Entrepreneurs' Club, University of Navarra**

The University of Navarra, in the city of Pamplona, Spain, has a strong interest in developing entrepreneurial spirit among its students. The ethos of the university is to create employers (and not only employees). The commitment to the development of future entrepreneurs is demonstrated by the establishment of the Entrepreneurs' Club (*Club de Emprendedores*). The Club, established in 2006, is for students interested in developing their business careers. The Club offers activities for students ranging from work placements and opportunities to network and meet entrepreneurs, to entrepreneurship training.

To ensure that all students are aware of the entrepreneurship training and other activities of the club, various methods are used to advertise its activities. First, all students are sent a letter inviting them to join the club at the start of the academic year. Social networking sites such as Facebook, Tuenti, Club Blog, YouTube and LinkedIn are used to promote the activities. Training activities are also advertised in the weekly university newsletter, and displayed on TV screens across the university campus. The university radio also has a weekly time-slot for the club to promote and discuss its activities. Assigned club members in each faculty promote the activities in lectures and tutor groups, and former participants of entrepreneurship courses and the alumni association of the club spread information about the courses through word-of-mouth. The club also has a stand during open days and other welcoming events for new students to introduce its activities.

While all faculties are involved in promoting the activities of the club, students from the communication, economy, engineering and law faculties most frequently join it.

4.1.4. Awareness-raising activities

The lack of exposure to entrepreneurship as a viable career option can be a barrier to participation in entrepreneurship education. Chapter 2.3 showed that a high percentage of people have never considered building a career around their own business venture. The surveys carried out among European policy-makers and guidance practitioners also confirmed these findings; respondents were asked to estimate the proportion of HE students in their country who express an interest in becoming an entrepreneur. The majority of those who answered (12 out of 15) stated that less than a quarter of students were interested in becoming an entrepreneur. It is important that HEIs find ways of raising awareness and thereby generating motivation to take up learning in this field.

Our research shows that events, such as entrepreneurship days and weeks, are one of the main channels through which HEIs disseminate key messages regarding entrepreneurship education. Such events are sometimes organised directly by individual HEIs and on other occasions they are developed in partnership with other stakeholders such as the ministry of education, local communities or the private sector. In Iceland, the Ministry of Education organises four annual events on entrepreneurship, targeting students in secondary and higher education. 'Make it happen' is a UK public/private initiative sponsored by universities, national business support service (Business Link) and one of the leading banks (HSBC). As part of the initiative, a roadshow is organised every

year around the UK universities to advertise the services on offer to graduates who want to start their own business.

In Bulgaria, the 'Rising stars' youth business forum was held for the first time in 2009. The forum is an opportunity for secondary school and university students to meet business professionals and entrepreneurs. In France, the University of Nantes organises an entrepreneurial marathon with multidisciplinary teams. The aim of this event is twofold: to raise student awareness of entrepreneurship as a career option and to encourage communication of students of different disciplines (NIRAS Consultants et al., 2008). Every year the European SME week engages HE students from across Europe ⁽²⁰⁾: in 2009 a range of seminars were held for Lithuanian HE students, which were facilitated by young entrepreneurs.

4.2. Embedding guidance in entrepreneurship education

Aspiring entrepreneurs appreciate practical learning opportunities, since mastering essential skills like networking, business planning, business idea development and opportunity recognition, client relations, communication, research, team work and leadership demands more than reading or learning theory. Instead, group assignments, presentations, real-life case studies, assignments for companies and mock scenarios help to build the necessary practical skills.

Such approaches to teaching entrepreneurship have guidance embedded in the learning process. The high level of interactivity and the focus on solving real-life challenges faced by companies and entrepreneurs engage the student in career exploration so that they become an active participant in the process itself. HE students can see how their personality matches a career as an entrepreneur as the practical assignments get them involved and can inspire them to think about their personality, and demands and rewards associated with entrepreneurship. Guidance associated with hands-on teaching methods is also strengthened by the fact that they allow students to get a taste of a typical day of an entrepreneur and get a feeling of the types of skills and attitudes they need to develop before embarking on an entrepreneurial venture. Typically, practical assignments also strengthen student capability to act on their own authority and

⁽²⁰⁾ European SME Week 2010. Available from Internet:
http://ec.europa.eu/enterprise/policies/entrepreneurship/sme-week/index_en.htm [cited 03.9.2010].

therefore improve their decision-making skills, which are necessary for any entrepreneur.

Our research shows that under- and postgraduate level courses and modules on entrepreneurship use the following practical teaching methods to stimulate learning and the student career exploration:

- case study based assignments and course work;
- group assignments to plan and launch a new business;
- real-life assignments for companies;
- development and assessment of business plans and strategies;
- business simulations and games;
- visits by entrepreneurs and visits to companies;
- observations and shadowing senior managers and entrepreneurs;
- work placements in start-up companies.

These teaching methods are typically combined with lectures and more traditional forms of teaching. Examples of courses which are purely theoretical or practical in their approach can also be found, but there is a clear shift in focus towards practical approaches (e.g. European Commission, 2008a; Herrmann et al., 2008; Volkmann et al., 2009).

Action-oriented, interactive teaching pedagogies methods are already prevalent in HEIs across Europe, but are seen as comparatively new and innovative in countries such as the Baltic States. The extent to which such methods are integrated into curricular or extra-curricular education opportunities varies. Some of these approaches are discussed next:

- (a) case studies, practical group work and assignments for companies;
- (b) internships and shadowing opportunities;
- (c) 'fully' entrepreneurial delivery models;
- (d) business simulations and games, and the role of new media channels.

4.2.1. Case studies, practical group work and assignments for companies

It is increasingly common for HEIs to use the 'business cases method' in association with businesses and entrepreneurs; examples were found in most European countries. When businesses provide students with real business problems to solve, the learning becomes mutual as the students learn from the practical experience and contacts, and the company gains further insight and a different perspective from the students. This also helps to build cooperation between established businesses and the prospective entrepreneurs. The method can result in better quality entrepreneurship learning for students and the possibility of gaining further perspectives in practical business problem-solving.

Example 18. Hec-Ulg Entrepreneurs, University of Liege, Belgium

The University of Liege is one of the two universities in the Walloon region, Belgium, which has developed a specific master's degree programme on entrepreneurship. The Hec-Ulg Entrepreneurs is a master's degree focusing on equipping students with the information, tools, and self-confidence required to become entrepreneurs. This master's degree is centred around providing students with soft, transferable skills and practical experience, which can help them with their entrepreneurial aspirations. The pedagogy of the degree course is unique through its use of a range of interdisciplinary 'missions' which tackle all aspects of the business cycle.

The degree offers the following seven missions:

- business creation – the development of a real and exhaustive business plan;
- corporate recovery – with support from a specialist in transfer and acquisition;
- selling and negotiating – one-week of intensive seminars followed by a work placement;
- strategy and growth – a diagnosis of business and growth and/or redeployment strategy;
- assistant to a manager – supporting and shadowing a senior business person;
- international communication – creating communication tools and plans;
- development of a personal project – after validation by a jury.

The missions/assignments are based on real contracts commissioned by businesses. These businesses wish to expand, evaluate corporate recovery, develop a new strategy, or plan an international expansion and thereby give students the opportunity to acquire hands-on experience, with the expectation that the end result will be readily useable by the client company.

The mission on business creation is overseen by a mentor from an enterprise. The mentor shares his/her experience with the participant and supports the set up of the work programme, fostering team work and developing the rigour of their work, while leaving the student with the overall responsibility for the result.

Students also have a chance to shadow and support a senior manager (to be their right-hand man/woman). The student learns how to overcome problems in a stressful environment and the impact this can have on business decisions and practices.

Experienced businessmen and women are included in the teaching panel. The degree is taught by a group of 60 lecturers and business experts, including entrepreneurs. The jury for the development of a personal project also includes professionals from the private sector.

Since September 2005, an average 20 students per year have participated in the programme.

The business case method is embraced by the entrepreneurial programmes of the Bocconi University in Italy, the Bucharest Academy of Economic Studies (ASE) in Romania, the European University of Cyprus and the University of Liege in Belgium. The Hec-Ulg Entrepreneurs postgraduate level course at the University of Liege (see Example 18) is run with close guidance from senior business professionals and entrepreneurs who participate in student practical assignments, teaching, mentoring and evaluating student performance. The programme also offers an opportunity for students to shadow experienced business managers.

The direct involvement of entrepreneurs in the teaching of entrepreneurship education has been ensured at the University of Valencia in Spain by having business owners finance and manage a Chair on entrepreneurship education. This means that teachers/lecturers on the accompanying course on entrepreneurship are drawn exclusively from the local business community; they

not only act as role models but are involved directly in teaching entrepreneurship education (McCoshan, 2010).

4.2.2. Internships and shadowing opportunities

Some other HEIs use internships/work placements as a method of familiarising students with the world of entrepreneurship. Internships can be an effective method of equipping students with entrepreneurial skills and careers provided that they are well organised and tailored, and supported by pre- and post-placement evaluations that allow students to reflect on the objectives and lessons they have learnt. Another important element is tailoring the placement to the needs of prospective entrepreneurs, for example, by organising internships in start-up companies. While it is mandatory for HE students in some countries/courses/HEIs to take part in a placement as part of their course, unless the placements are tailored to the entrepreneurial context, the impact on the skills and aspirations gained may not be as great as initially hoped.

There is usually a cost attached to organising high quality, targeted internships in start-up companies. Consequently, relatively few entrepreneurship programmes identified as part of this study use this method. A lack of such opportunities can also depend on the HE system of the country and the extent to which work placements are used. Work placements are not a mainstream feature of HE systems in some countries (e.g. the UK) and in others they are used primarily by vocationally orientated HEIs, such as polytechnics (e.g. Finland). In some countries work placements are only used in the context of business and management studies and are yet to be introduced as part of entrepreneurship courses (e.g. Iceland). In Lithuania, the government made a decision in March 2010 to invest an additional EUR 4.6 million (LTL 16 million) in work placement schemes for HE and VET students. In the Netherlands, the number of opportunities for prospective student entrepreneurs to participate in internships is being increased in the context of the HOPE programme. The HOPE programme is a public/private initiative to increase the entrepreneurial offer of universities of Leiden, Delft and Rotterdam.

The Norwegian entrepreneurship programme (*Gründerskolen*) (as mentioned in Example 16) is an example of a successful entrepreneurship programme that involves shadowing and a work placement; students are required to participate in a three-month internship in a start-up company abroad (see Example 19).

Example 19. Internships in a start-up company: the case of the Norwegian entrepreneurship programme (*Gründerskolen*), Norway

The programme combines the theoretical aspect of business creation with practical assignments such as preparation of a real-life business plan or a marketing strategy. Classroom and course work based studies are followed by an internship in a product or service focused start-up company abroad. As the programme seeks to boost the number and success rate of potential high-growth companies, the internships are usually hosted by high-tech companies, in companies such as IT, biotech or other technology sectors, which are less than three years old. The entrepreneurship programme is open to students from all academic disciplines but attended usually by students with either technical or scientific research background (e.g. science and engineering), or economics students.

The programme has had a very positive impact on the entrepreneurial aspirations of participants. Based on the feedback from a 2009 survey ⁽²¹⁾ administered by the alumni association, 40% of students had either founded or co-founded a company. Many students had continued their studies further, e.g. through undertaking a PhD, or were working in consultancy. About 94% of students felt that participation in the programme had a positive impact on their chance of getting a job. The number of students participating in the programme has also increased rapidly, from about six students in 1999 when the programme was launched to about 150 in 2010.

4.2.3. Fully entrepreneurial delivery models

General business and management courses can also be built around a fully entrepreneurial delivery model. One example comes from the Laurea University of Applied Sciences in Finland. They have developed a peer-to-peer teaching method which is used on some of their undergraduate business programmes (see Example 20). Project work with companies, entrepreneurs and organisations prepares students to direct and manage projects that are involved in running a business. The teaching method ensures that students learn to be independent, possess skills of initiative, communication and teamwork. As students have to take responsibility for their own learning, a certain level of maturity is also gained. Students regard the prospect of discussing and working with real entrepreneurs as providing the best opportunity for gaining knowledge of entrepreneurship. Further, through working in a project-based environment with others, students increase their self-knowledge, learn about their own strengths and ways of working, and what motivates them.

⁽²¹⁾ The survey was sent to about 700 students and 220 responses were received, resulting in a response rate of 31%.

Example 20. Laurea University of Applied Sciences, Finland

Laurea University of Applied Sciences is a Finnish ⁽²²⁾ vocationally oriented higher education institution located near the capital city, Helsinki ⁽²³⁾. A key principle in Laurea's teaching philosophy is learning through working on real-life business projects. Laurea aims to prepare students for employment by promoting entrepreneurship through professional advice and support to students in developing their own business ideas.

Peer-to-peer teaching method

A central pedagogical tool for this entrepreneurial model is a peer-to-peer (P2P) teaching method. Laurea has been using a P2P teaching method on its bachelor degree on business management (*Tradenomi*) since 2008. Previously, the method has been used in internationally renowned universities like Harvard and MIT to teach languages, mathematics and physics. On the P2P stream, students learn by working in groups on real life business projects with public and private sector organisations. Students get to experience how projects are run in real life businesses, and apply their newly acquired knowledge to solve real life problems. The cornerstones of the approach are experience, partnership, creativity, authenticity, and research orientation.

All project work on the P2P stream is undertaken in groups of four to five students. There are no lectures and the only individual project is the final year thesis. Projects usually last around half a year, so students typically work on four projects a year; two are international projects which require students to carry out their assignment in English.

The P2P method relies heavily on self-management and independent work. Students start each project by constructing a mind-map that defines what they should study and what steps they should take to be able to solve the problem. Teams develop a project plan, setting roles for each team member, defining the process and the sources of information that need to be found, as well as agreeing on milestones and deadlines. P2P projects are always authentic assignments for companies and organisations, enabling students to experience how real-life projects are run. Projects involve a range of topics and tasks, such as developing a marketing plan, undertaking a competitor analysis, and analysing strengths and weaknesses of businesses or business ideas.

The role of the teacher on a P2P course is markedly different from that of a teacher on a 'normal' course. Teachers assume the role of 'older colleague' or 'facilitator', and they have to be flexible and multi-task.

Outcomes

The course has been received well by all parties. On average, student satisfaction on the P2P course is higher than on the 'traditional' *Tradenomi* course. Students feel positive about the practicality of the course, and the way it meets the demands of real companies and workplaces. Students like testing and trying things themselves, rather than learning about topics through lectures. The interaction and working with other students and employers receives positive feedback. Students stress that they have learned to work more independently and take responsibility for their own learning. Students must also be able to handle uncertainty and to be able to work from often nebulous and unclear information. One of the teachers describes this as 'packaging initial chaos into order'.

Because most of the students on the course are just out of school, many starters are too young to have real, 'set-in-stone' career aspirations. But the process of learning through project work with companies and other students helps to clarify their career direction and work areas and processes in which they enjoy working.

Teachers report that companies have been positively surprised by the results, and have gained much from participating in the programme. As many small companies operate with squeezed resources, they do not often have time to develop new initiatives or systems themselves. For instance, a small translation company that participated on P2P now has a marketing plan, a brand strategy, internet pages in several languages, as well as a logo. The company owner reports that working with students made him think about things that he has never had time for, such as strengthening his marketing methods.

Despite encountering some resistance in the beginning from other staff members, the course has begun to influence ways of teaching and working in the university, and is today seen as Laurea's own development project. The model will soon be used to teach the health and social services degree.

⁽²²⁾ Available from Internet: <http://www.laurea.fi/> [cited 26.05.2010].

⁽²³⁾ Laurea is one of the Finnish polytechnics (*ammattikorkeakoulu*). The Finnish higher education system consists of two complementary sectors: polytechnics and universities.

It is also important to note that this type of 'entrepreneurial' teaching and learning may discourage some students from starting a career as an entrepreneur, as students experience the negative aspects of entrepreneurial career paths. In some cases this involves long hours, a heavy workload, and risk taking. However it is also expected that the knowledge, tools and methods gained through studies will help them to overcome problems they may encounter as an entrepreneur. Such experience can also help students to realise that they can take on any project, such as running their own business, and be able to cope with it.

Example 21. Queen's University, Belfast, Northern Ireland

Queen's University is situated in Belfast, Northern Ireland ⁽²⁴⁾. It opened in 1849, and today has more than 17 000 students and 3 000 members of staff.

The Queen's University has developed a pioneering model of entrepreneurship education. Since 2000, 67 modules on entrepreneurship have been developed in non-business disciplines, reaching 11 000 students across the university. Initially entrepreneurship was embedded in the curriculum for science and engineering subjects, but in the academic year 2007-08, entrepreneurship modules were also made available for all students in humanities and social sciences.

The main elements of the entrepreneurship modules are as follows. They are:

- practically oriented;
- based on an experiential model of learning;
- tailored to the students' field of study;
- compulsory, not elective subjects.

To develop the tailored modules on entrepreneurship, academics selected a compulsory module from each discipline and developed teaching material that was customised to student needs on the course. Members of staff chose to integrate elements of entrepreneurship into the second year history module on heritage sites. Students first study the history of heritage sites and then develop a project which focuses on the commercialisation of heritage sites.

Entrepreneurship modules are compulsory for all undergraduate students. The idea of making the modules elective was rejected as it was thought to be counterproductive. Compulsory attendance is based on the idea that entrepreneurship skills can benefit all students, rather than just those who want to start a business. Also, students often do not consider entrepreneurship as a career option because they are unaware of the ways it could apply to their field of study. Compulsory teaching, therefore, gives them a genuine opportunity to explore how they can use their skills and knowledge in a business context. Once they have this experience they can make an informed decision regarding whether it is an attractive career option for them. On graduation, all students who pass the module receive a certificate in entrepreneurship together with their degree.

The model developed at Queen's University has now been adopted by universities in China, India, Canada, Sri Lanka and a number of universities throughout the UK.

The Queen's University in Belfast, Northern Ireland, is an example which has taken the entrepreneurial dimension to a different and 'higher' level than most other HEIs in Europe. Since 2000, the university has been operating a pioneering model of entrepreneurship education, which means that an experiential and

⁽²⁴⁾ Queen's University Belfast. Available from Internet: <http://www.qub.ac.uk/> [cited 03.9.2010].

practical entrepreneurial training dimension has been embedded in the curriculum for all science, engineering, humanities and social science students (see Example 21). Entrepreneurial modules are compulsory for all students in these courses; in 2010 alone 11 000 students studied at least one module on entrepreneurship. As a result, in 2009, the Queen's was named the entrepreneurial university of the year by the National Council for Graduate Entrepreneurship (NCGE), a national body which aims to raise the profile of entrepreneurship and the option of starting-up new business as a career choice among students and graduates.

4.2.4. Business simulations and games, and the role of new media channels

New media channels and technologies are also used in some courses to aid practical learning opportunities for students on entrepreneurship courses. In Denmark, some HEIs use video lectures where successful entrepreneurs speak on a certain topic, such as how to assess business ideas. Students are also given access to a web-tool which they can use to evaluate their business idea. In Luxembourg, HE students have the opportunity to create business plans with face-to-face or online support from business coaches through a web portal (www.businessplan.lu). *Sogn og Fjordane* University College in Norway has developed the REAL tool to support entrepreneurial teaching in secondary and higher education. The material contains exercises/activities emphasising creativity and creative processes, teamwork and communication skills, and understanding of the local community, economy, accounts and marketing/sales.

New technologies have also been used to develop virtual business games for HE students. In generic terms, business simulations and games are used by HEIs in Europe, however not necessarily to the same degree as in upper secondary education. According to a survey of national experts on entrepreneurship, such activities are available in HEIs in Belgium, France, Latvia, Lithuania, Luxembourg, Netherland, Norway, Poland, Slovakia, Slovenia, Spain and the United Kingdom. In Slovenia, the Gea College of Entrepreneurship uses commercial games and decision-making simulations, business negotiation simulation, and composition of different kinds of commercial reports as pedagogical tools to guide students in entrepreneurship. It seems that such activities are not available in Malta whereas in Bulgaria, Greece, Hungary, Iceland, Ireland and Portugal business simulations are only occasionally used by HEIs. In some countries HEIs do not regard business simulation games as an important pedagogical tool (e.g. Greece).

In Lithuania, one university, supported by EU funding, has developed an international business simulation game for university students across Europe. Between 2006 and 2008 the ISM University of Management and Economics in Lithuania developed the project OfficeInterActors, which is a virtual platform through which students and mentors meet and participate in role-plays that are realistic and linked to their professions. This particular project involved a business simulation game for entrepreneurial learning. For six weeks the participants from different European countries (Belgium, Bulgaria, Spain, France, Lithuania, Romania and other countries) met once a week through the online learning platform and participated in joint various problem-solving tasks. The project aimed to motivate young people to use their entrepreneurial ideas, but also to improve communication, intellectual, information management skills.

4.3. Encouraging entrepreneurial activity in students

HEIs across Europe are also involved in encouraging entrepreneurial activity in students through a range of extra-curricular activities. These include:

- (a) entrepreneurship competitions and awards (business plan competitions);
- (b) dedicated programmes on building self-confidence and self-efficacy;
- (c) networks of student entrepreneurs and meetings with business experts and entrepreneurs.

The goal of such activities is normally to 'demystify the start-up world'; to make young people more aware of their entrepreneurial attributes and skills and encourage them to see entrepreneurship as an option for professional life. They are often also a platform for learning about and meeting successful entrepreneurs and other students who have recently started a business; role models are seen as a key to motivating students (European Commission, 2006a; European Commission, 2008a; European Commission, 2010a; Potter, 2008; Schoof, 2006).

4.3.1. Business plan/idea competitions and awards

Business plan/idea competitions and awards have become an established feature in European HE. They give potential young entrepreneurs an arena to compete in, where business professionals and experienced entrepreneurs can evaluate their business ideas/plans and provide a critique (Volkman et al., 2009). Competitions, which typically have a monetary (or other) prize, incentivise and drive young people into 'performing to the best of their ability' and pursuing their entrepreneurial ideas. At the same time, business competitions allow

investors, entrepreneurs and other business professionals a means to connect with and meet students and to disseminate good practice for business management, leadership and development. They are also an effective promotional tool as they provide a means of reaching 'masses' of students.

Examples of high profile business competitions for HE students were found in most European countries, including Austria, Belgium, Czech Republic, Denmark, France, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Norway, Poland, Portugal, Sweden Slovenia, Slovakia and the United Kingdom. They often involve private sector partners as sponsors and jurors. For instance, in Austria the nationwide business plan competition *ideas2business i2b* is subsidised by the chamber of commerce and a bank. Competitions for HE students tend to be more ambitious and longer than the ones involving secondary school students.

Example 22 illustrates an example of an international business competition from Latvia which is hosted by the Stockholm School of Economics in Riga (SSE Riga). The competition aims to promote intercultural understanding as well as entrepreneurial skills.

Example 22. The Peak time competition, Latvia

The Peak time competition is organised by first year students of Stockholm School of Economics in Riga (SSE Riga). This is an international event which attracts many participants from all over the world. Its aim is to challenge talented and energetic young people with complex corporate problems by testing them with a set of various tools: business simulation (Cesim), case studies and guest lectures (inter alia). In 2010 alone there were 1 200 participants from 202 universities, 43 countries and six continents. The competition is organised in three stages before 20 'best teams' are selected and invited to Riga for the final. Only undergraduate students are eligible to apply.

The first phase of the competition starts around January each year as teams form and apply for the competition. Teams may consist of students from the same university/country or from multiple establishments/countries.

The second phase of the competition takes place in a computer-simulated business environment called CESIM-On-Service. Each team represents a virtual company and for one month, they must compete against each other for the largest market share and highest share price. Given certain economic and financial constraints, the teams have to make decisions in relation to their company's finance, investment, R&D, production planning, marketing and logistics, etc. Company-management decisions have to be made approximately twice a week. After one month each company is assigned assessment points based on their performance and position within their 'regional group'.

The third stage of the competition lasts one week and consists of a problem-solving task. Teams are given real-life problems prepared by professionals from the business and government sectors. The teams must come up with a solution to the task which they then have to present to the judges.

Finally, the remaining teams ranked according to their points from the three previous rounds, and the 20 highest-ranked participants who will be able to enter the fourth and final round, are announced at the end of March. The finalists are invited to Riga at the beginning of May where they compete in more advanced simulations and case studies and submit a short movie about their team. The team that performs best at the Peak time final is declared champion title and awarded a monetary prize.

The Latvian example above also shows that the role of private businesses is developing. They are still involved as sponsors and members of juries but more and more companies are involved in such competitions by giving real-life business challenges for students to solve. This is also the case with the Excitera innovation challenge open to students at the Royal Institute of Technology in Sweden. The objective of the challenge is to bring together students and researchers to work on projects proposed by companies. The competition is eight weeks long and participating teams are made up of a maximum of three people. In the Czech Republic a popular competition called Czech head is aimed at scientists, researchers and students (European Commission, 2008a).

4.3.2. Dedicated programmes on building self-confidence and self-efficacy

The entrepreneurial activities of university students depend largely extent on perceived barriers to and support for new venture creation (Volkman et al., 2009). A perceived lack of relevant experience and a lack of self-confidence are two reasons often cited by students and new graduates for not engaging in entrepreneurship after graduation (European Commission, 2008a, p. 24). Confidence is also closely linked to another important characteristic highly relevant to the entrepreneurship agenda, self-efficacy ⁽²⁵⁾. The primary reason is that a highly efficacious student will have greater confidence in their own abilities to accomplish a range of activities pivotal to the creation of a new venture. Self-efficacy also is concerned with commitment to accomplishing goals, which is necessary for novice entrepreneurs as most have to go through times during which they need to persist in the face of adversity to convert abstract ideas into marketable products and services (Vyakarnam, 2005).

Dedicated programmes and activities focused on building the confidence and self-efficacy of HE students are still few. It is often expected to be the by-product of many extra-curricular activities but is less frequently the primary focus; instead many activities seek to build the skill base and raise awareness. The Enterprisers programme is one of few exceptions (see Example 23). It is built upon values and activities, which seek to cultivate self-efficacy of participants so that they will try, learn and persist in the pursuit of entrepreneurship (Vyakarnam, 2005). The programme was jointly developed by Cambridge University in the UK and MIT in the US, but is now offered also by universities in Australia, France, Germany and Malaysia.

⁽²⁵⁾ Self-efficacy refers to 'people's judgments of their capabilities to organise and execute courses of action required to attain designated types of performances' to the extent that their 'level of motivation, affective states and actions are based more on what they believe than on what is objectively true' (Bandura, 1986 and 1997, in Vyakarnam, 2005).

Example 23. **The Enterprisers programme, Cambridge University, the UK**

Enterprisers is a four-day residential programme held usually in conference locations near to Cambridge. It is targeted primarily at PhD students from the UK and international universities, although it was originally set up for undergraduates and is also generally open to the general public.

Content

The programme is seen as an 'educational experience' rather than as a traditional entrepreneurial education programme. The goal is to develop entrepreneurial confidence in individuals so that they can begin to apply their knowledge and skills in entrepreneurial ways to create new business ventures or support existing ones through being more proactive and innovative. Content is characterised by a highly participative approach that enables people to gain the motivation and intent to make things happen.

Day one focuses on self-awareness activities. It looks at values, ethics and goals in setting up a business. The day is also about defining and better understanding entrepreneurship. The second day focuses on idea creation ('ideation') and project planning. Day three focuses on teamwork, leadership and utilisation of resources to achieve desired outcomes. Learning how to lead others effectively in different environments is a particularly important outcome for day three, as is understanding the need for a strong network. The final day is about maintaining motivation and commitment in self-employment.

Enterprisers is run by the programme coordinators with a support network of other speakers and mentors. For each programme there are 3-4 panel speakers who are invited to share their knowledge, insight and experience with the nascent entrepreneurs and students at the programmes. The programme also employs 16 mentors who facilitate group sessions and act as a point of contact and information for participants. The mentors come from different industries, companies and government agencies.

Beneficiaries and results

Between 2002 and 2009, 22 programmes were organised and more than 1 200 students participated in them. Participants come from a diversity of backgrounds but most come from arts and social science (41%) and sciences, maths and engineering backgrounds (39%). Enterprisers has been successful in developing skills and increasing the likelihood that participants will follow an entrepreneurial career-path:

- more than 60 participants have subsequently started businesses (since 2003). This accounts for around 5% of participants;
- studies show that the proportion of participants who feel they had a 'good' understanding of what it takes to start a business rises from 24% at the beginning of the course to 73% at the end (Vyakarnam and Hartman, 2010);
- the percentage believing they have the ability to start a business more than tripled from 20% at the beginning of the course to 67% at the end (Vyakarnam and Hartman, 2010).

An earlier study has also shown that the programme has a strong and long-lasting impact on the participants' continuing sense of efficacy, particularly for skills related to leadership and entrepreneurship.

Sources: Barakat and Hycla, 2009; Vyakarnam, 2005; Vyakarnam and Hartman, 2010.

4.3.3. Networks of student entrepreneurs and meetings with business experts and entrepreneurs

Networks of student entrepreneurs are another non-formal guidance method used by European HEIs. Such networks are usually for current student entrepreneurs and other students who are contemplating the idea of launching a

business during or after their studies. Personal and professional networks can be an invaluable resource, and it is particularly important that student-led entrepreneur networks engage as much as possible with entrepreneurs, business experts and coaches, chambers of commerce, the public employment service, associations representing entrepreneurs, and other support infrastructure for entrepreneurs. At the early business formation stage such networks can help students to establish themselves and their ideas in the entrepreneurial community and pave the way for the development of business relationships. The role of networking groups here is in providing the softer benefits such as credibility/legitimacy, advice and problem-solving, confidence and reassurance, motivation/inspiration, relaxation/interest (Edmondson, 2000). They can also provide peer-to-peer learning opportunities by allowing students to share experiences, discuss practical ways of solving problems and to access information about training and support services. At the start-up stage there is a shift towards using networks to gain more tangible benefits to develop new business relationships (ibid.).

Networks of (HE) student entrepreneurs can be found in Denmark, Hungary, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Spain, Sweden, Poland and the United Kingdom. Such networks are only infrequently available for students in Bulgaria. In small countries, such as Iceland, these networks can be informal: they are not formalised due to the size of the student population. In the Netherlands one can find international networks on entrepreneurship and in Sweden partnerships often involve several universities. In Greece, a new HEI network infrastructure has been recently established with the hope of increasing collaboration between HEIs and venture capitalists. In Romania, the Academy of Economic Sciences and the Polytechnic University together with other state universities and the Group of Applied Economy are currently working to launch a national network on entrepreneurship in HE. Networks involving student entrepreneurs are usually coordinated by universities but they can also be organised by local authorities (this is the case in Sweden), chambers of commerce (as in Luxembourg and Hungary) or student-led associations (Spain and Norway).

The Entrepreneur Club at the University of Navarra organises networking evenings, business breakfasts and company visits, and coaching and training sessions; these provide real opportunities for students to develop their networking skills through direct interaction with successful entrepreneurs, experts and business consultants. Such opportunities provide candid but helpful feedback on business ideas and can uncover the business founders' journey and answer any questions people have about the start-up world.

Example 24. **Networking opportunities offered by the Student Club at the University of Navarra, Spain**

The Entrepreneurs' Club (*Club de Emprendedores*), introduced in Example 17, offers a combination of various networking activities for would-be and novice student entrepreneurs. Twice weekly thematic seminars are organised for students, and the members of the club can attend business breakfasts with invited entrepreneurs, allowing them the opportunity to discuss their issues and obtain information and advice directly from them. Conferences are also organised by the club, though students can offer proposals to invite specific entrepreneurs. At the international networking evenings, students organise working groups to discuss their views and opinions on different topics from different cultural perspectives.

Ideas originating from the student members of the club include company visits, conferences and thematic seminars.

In 2006, when the club launched, there were 30 registered members. Four years later, the Entrepreneurs' club had approximately 750 members and some 2 100 students per annum participating in the club's activities. The average age of club members is 20. There are slightly more women than men enrolled as members of the club, though this reflects the composition of the total student population at the university. Many of the club members are from the engineering and economy faculties.

The growth in membership and participation in activities suggests that students value the experience they can gain from participating in club activities. Students appear to be attracted by the club's activities as an adjunct to their studies as they help give students grounding in the reality of business.

Few students set up a company straight after their studies; graduates often prefer to gain practical work experience before pursuing entrepreneurial aspirations. Therefore, alumni networks and clubs are particular useful way of supporting recent graduates. One such example can be found from Latvia where the Stockholm School of Economics in Riga runs an alumni entrepreneur club. The club regularly brings together current and future young businessmen to help them build networks, learn from one another and encourage new ventures.

In Slovenia, the Faculty of Management at the Slovenian Rectors' Conference (*Univerza na Primorskem*) has designed an intranet service for HE students. Through this platform HE students can network or learn from experiences of other students who have gone to set up a business.

4.4. **Providing enterprise start-up support for students**

Higher education institutions, technical HEIs in particular, are potential breeding grounds for high technology and high-growth companies (Volkman et al., 2009). For this reason there is a clear rationale for supporting students in practical, technical and financial ways in their efforts to start and grow enterprises that benefit society. Traditionally, however, European universities and polytechnics have placed a greater focus on developing entrepreneurial capacities and mindsets. This has been demonstrated by key literature in this field (e.g.

European Commission, 2008a; Volkmann et al., 2009). In North America (and some Western European universities as well), the emphasis has been much more on the commercialisation of research and innovation.

This Cedefop study has found that many HEIs are involved in providing pre-start-up and start-up support for aspiring student entrepreneurs, though this is often not as widely available as some of the other entrepreneurial interventions. Enterprise support offered by European HEIs can be grouped into two types: pre-start support is offered to students who have an interest in business formation but do not have concrete business ideas; and start-up support is provided to students with advanced business ideas and includes personalised technical support on a number of issues, such as business plan preparation, marketing of business ideas, preparation of funding applications, financial management of new ventures, and legal training (e.g. intellectual property rights).

There are, however, great differences in the delivery methods of pre- and start-up support. Such support is typically provided by:

- (a) in-house enterprise and guidance experts;
- (b) business incubators;
- (c) entrepreneurship centres;
- (d) mentors and business coaches;

These are discussed in more detail in Chapter 4.4.1.

4.4.1. Business start-up support offered by careers services and in-house business experts

Surveys carried out as part of the study to investigate the views of policy-makers and practitioners with a guidance remit showed very clearly that many guidance practitioners do not have the necessary competences to support students interested in becoming entrepreneurs. This is one of the key reasons why only a relatively small share of European HEIs provide start-up support. Some HEIs simply provide a referral service but others and their careers services go further and team up with experienced enterprise coaches and business start-up advisors.

Start-up advisors offer technical support to students and graduates. They can guide students and graduates through the business planning process, help them to understand the strengths and weakness of their business idea, find sources of finance, and understand the principles of intellectual property and company formation. Business advisors can also assist students to explore their abilities and address the reality of starting-up a business. They are often brought in from local enterprise agencies and are either entrepreneurs or trained as business advisors. They make positive role models for students.

Example 25. **Pre-start-up and start-up support offered by Newcastle University**

The entrepreneurial development unit in the careers service of the university offers business pre-start-up and start-up support to students and graduates.

Enterprise pre-start support

On their first visit to the unit, students arrive in a creative open space known as the 'elevator'. There they can do online research, test their entrepreneurial skills and assess their capabilities.

At the elevator, students have a diagnostic meeting with a start-up advisor. Start-up advisors are members of the unit's team who have an introductory discussion with students about their interests and experiences and guide them through the services available at the unit. Start-up advisors make an assessment of student needs, and make referrals to other members of staff (entrepreneurs in residence and business advisors) or to further training, if needed. Start-up advisors can also help students to develop key skills, such as networking, and to build their confidence.

Four start-up advisers work full-time at the unit; they are employed by the unit because they have good enterprise skills (innovation, creativity, resourcefulness) and are interested in personal development.

Business start-up support

Students with more advanced business ideas can be referred directly to business advisors and entrepreneurs in residence.

Business advisors offer technical support to students and graduates. They can guide students and graduates through the business planning process, help them to understand the strengths and weakness of their business idea, find sources of finance, and understand the principles of intellectual property and company formation. Business advisors can also assist students to explore their abilities and look at the reality of starting-up a business.

Newcastle University usually receives business advisors from a local enterprise agency called TEDCO. Business advisors are either entrepreneurs themselves or are trained as business advisors. The TEDCO partnership is a good example of regional cooperation because it has a significant regional retention element; students build a local support network and this encourages them to start-up their business in the area.

Entrepreneurs in residence are successful entrepreneurs themselves who have interesting stories to share with students and are well aware of the challenges students might face when they try to their business ideas into practice. They help the unit's members of staff to deliver their services by mentoring, providing specific technical support to students, connecting the university with their networks and teaching some of the training sessions. Entrepreneurs in residence can discuss the student's business ideas, share their personal experiences and help them generate a plan for business. The charismatic personality and wealth of business experience make entrepreneurs in residence positive role models for students.

The university provides start-up support to around 80 students a year, of which around 25-30 will launch a new business with the support of the unit.

Many German (e.g. the University of Wuppertal) and British (e.g. Birmingham, Cambridge, Lancaster and Leeds) universities offer in-house start-up support to students who want to start-up new ventures. This is delivered by established entrepreneurs or business advisors in one-to-one meetings. The start-up service offer of the entrepreneurial development unit in the careers service of the Newcastle University serves as another example of good practice. As shown in Example 25, besides diagnostic meetings with start-up advisors,

prospective (student) entrepreneurs have an access to experienced business coaches and entrepreneurs.

4.4.2. Business incubators

Invention, research and technological development can be transformed into innovation; entrepreneurship is important as a diffusion mechanism to transform scientific inventions (academic spin-offs) into new products, services and businesses. Consequently, many individual HEIs, or networks of HEIs, have set up incubators to nurture enterprises that can be spun off, sometimes with the support of venture capital provided by the HEI or with the help of HEI connections (Volkman, et al., 2009). Incubation is a business guidance process that accelerates the successful development of start-up companies by providing entrepreneurs with targeted resources and services. The main goal of the incubation process is to produce successful enterprises that are financially viable and freestanding. While much of the support offered by HE-related incubators is technical, practical or financial by nature, advice from experts and investors is fundamental to the service.

Examples of successful incubators situated in HEIs were provided by HE entrepreneurship experts interviewed from Austria, Cyprus, Denmark, Finland, France, Germany, Greece, Ireland, Iceland, Latvia, Lithuania, Liechtenstein, Netherlands, Poland, Slovenia, Spain, Sweden and the United Kingdom. In Hungary and Portugal incubators are predominantly run by regional authorities, not universities. Incubation services are run by national public bodies in Luxembourg and Malta (Malta Enterprise and public research centres). In Bulgaria and Romania business incubation opportunities do not exist for HE students or are very rare. In countries where business incubators do exist, the quality of services differs between institutions. For instance, in Iceland technology parks and business incubators are either well established with developed services, or new and in need of help to function well.

In some of the new Member States (e.g. Latvia and Lithuania) there is growing interest in business incubation. In Latvia, several business incubators are currently being developed, which will provide entrepreneurial possibilities to a variety of individuals, including HE students (Zarins, 2009). For example, the Riga Science and Technology Park (RSTP) attached to the Riga Technical University (Latvia's principal technical university) is set to be one of the largest innovation hubs in the country. A number of incubators exist in Lithuania, but only a few target HE students. One of these is the recently established business incubator at Siauliai University.

The Temporary entrepreneurial positions (TOP) programme is a good example of an incubation programme from the Netherlands (see Example 26). It provides multiple forms of support to new entrepreneurs including scientific mentoring, a course on entrepreneurship and administrative support. These forms of support guide new entrepreneurs through the first year of the company's operation, the year most crucial to the company's success.

Example 26. TOP programme, University of Twente, the Netherlands

The University of Twente's Temporary entrepreneurial positions (TOP) programme has been running for 25 years. The scheme was set up to guide new businesses – in particular knowledge-based firms – through their difficult first year and enable the local region to benefit from the knowledge available from the university. The programme has been a great success and has benefited over 400 entrepreneurs to date. The objective of TOP is to encourage graduates of the university who are starting their own knowledge-based companies by housing them for one year within one of the university's participating research-groups relevant to their business.

Prerequisites for entering the programme are ownership of a business idea matching the interest of staff members in one of the university's research-groups and a consistent business plan. The programme offers the entrepreneur the following support:

- office space at the research-group's premises, paid by the programme;
- secretarial support (within certain limits), use of all communication aids: computer, fax, copier and telephone in arrangement with the research-group;
- laboratory facilities – as some companies require access to expensive equipment, by arrangement with the research-group, entrepreneurs may be provided with access to such equipment;
- financing – to allow entrepreneurs to concentrate fully on product/business development, the TOP-entrepreneur is granted an interest-free loan of EUR 14 500 where necessary, to be repaid within four years;
- the Becoming an entrepreneur course – to help participating entrepreneurs develop important skills such as how to write a sound business-plan. The course is part of the university curriculum and is offered for free to students;
- scientific mentor – the researching staff member who ultimately decides upon the entrepreneur's participation in the programme also acts as 'scientific mentor';
- business mentor – the entrepreneur is matched with an experienced businessman who started his own business in the past.

Participation in the TOP programme is granted on the basis of a business plan. The plan then forms the basis for further business development in the incubation phase and its production is guided by advice of the programme manager.

Participants in the programme receive both a mid-term review and exit interview with the TOP commission. The commission monitors whether the entrepreneur is achieving his/her objectives. For example, if the entrepreneur is found to concentrate too much on desk research and too little on business the commission will intervene.

Source: http://www.utwente.nl/top/general_information/the_offer.doc/ [cited 03.09.2010]

Some HEI based incubators target students from specific sectors. For example, the Aalto Start-Up Center at the Aalto University, Finland, is a business incubator focused on developing innovative business ideas from the creative sector into successful enterprises. Other incubators are aimed at academic staff

at universities (including former Ph.D. and other research students). For example, the QUBIS Centre at the Queen's University Belfast has helped to create more than 50 companies and generated more than 1 000 jobs through support it provides for academic members of staff and researchers to commercialise their research (see Example 27).

Example 27. Qubis Ltd, Queen's University Belfast

Qubis Ltd was established in 1984 as an investment which takes an equity holding in a new venture in return for an investment of cash and/or intellectual property. Academic members of staff and research students can receive funding from QUBIS to start a business. As individuals who receive the financial support are not experienced entrepreneurs themselves, QUBIS also provides soft support and guidance to potential entrepreneurs in an informal manner. This includes: sourcing appropriate business partners; help with business planning; advice on intellectual property issues; advice on various legal agreements; company secretarial services; access to incubation centres; advice on the relevant government assistance programmes for funding and further support; membership of an informal network of over 30 other similar companies in the region; and strengthened management team through the appointment of experienced non-executive board members.

The advantages of the holistic approach adapted by Queen's are not only limited to students. The continuous support offered to students and academics benefit also the local economy by creating new jobs in the region. Since its establishment, QUBIS has created more than 50 companies and generated more than 1 000 jobs. Most companies supported by QUBIS are active in high-tech sectors such as software development, chemicals, and engineering. Despite the negative economic climate, in the last two years QUBIS has created five new high-tech companies.

Often the guidance value of incubation services such as QUBIS Ltd. is not highlighted; instead more attention is paid to scientific and financial support they provide. However, the representatives of universities such as Queens' University Belfast emphasise that even though these guidance activities on entrepreneurship are often provided informally through one-to-one meetings with the new entrepreneur, they are considered to be of paramount importance and contribute substantially to the high success rates of new businesses.

Reykjavik University's Idea House is a rare example of a bottom-up 'incubation' initiative which sprang up as a reaction to the financial breakdown of Iceland. It is run by the University and the Iceland Academy for the Arts and operates as a meeting place/entrepreneurship centre for seed companies. The house is located in an abandoned factory and provides workspace, internet connection and meeting facilities as well as a cafe. Entrepreneurs have to apply to be able to use the office facilities, but the cafe is accessible for all. Advice is provided by people from the university or other hub 'residents'. According to an Icelandic expert, 'this is a real grassroots movement; the students organised themselves and have found a way to transmit the positive message in midst of a crisis; to be a doer and take command of your own situation'.

4.4.3. Entrepreneurship centres

In some countries, HEIs or national/regional authorities have established entrepreneurship centres to foster enterprising activities among students and staff. These centres often pave the way for business incubators (see above). Entrepreneurship centres coordinate entrepreneurial activities, such as courses, awareness-raising activities and entrepreneurship education programmes. Entrepreneurship centres were identified in Denmark, Hungary, Iceland and Netherlands.

Six entrepreneurship centres are located in Dutch HEIs (NIRAS Consultants et al., 2008). One of these, the entrepreneurship centre of the Delft University of Technology, provides a good practice example in this field. The centre has embedded entrepreneurial educational activities in the curricula throughout the university on the bachelor and master levels and recently introduced a programme for PhD students. Lectures have an interdisciplinary character and are developed and delivered by members of staff from different faculties. The centre also organises several extracurricular activities, such as a summer school programme or guest lectures (Ibid.).

4.4.4. Mentoring and business coaching

A mentor is someone with more experience, sharing and imparting knowledge to someone younger or less experienced. The concept can work well in a business environment where an entrepreneur may have a great idea for a business but needs guidance in turning it into a successful and profitable venture (further information about entrepreneurial mentoring can be found in Chapter 5.1).

Though entrepreneurial mentoring has been identified as one of the most successful guidance relationships in the context of entrepreneurship (e.g. European Commission, 2006a; St-Jean and Audet, 2009), one-to-one mentoring programmes are less common than the other three start-up guidance methods in HEIs in Europe. Nonetheless, our research identified HEIs using mentoring as a form of enterprise start-up support in Belgium, Spain, France, Latvia, Hungary, Portugal, Finland, Sweden and the United Kingdom where they are most commonly used as part of a business degree. Mentoring and coaching programmes are organised by universities, by university career centres and by student unions (the latter is the case in Sweden). Mentoring programmes are only rarely available for HE students in Bulgaria, Ireland, Luxembourg, Netherlands, Poland and Slovenia. In Norway mentoring arrangements are being piloted. In Luxembourg, the Chamber of Commerce has developed a mentoring programme which is not only available to HE students but also to other potential

entrepreneurs who might need guidance and support. Mentoring schemes are not available in HEIs in Malta, Romania and Slovakia.

A good practice example of a mentoring scheme for HE students is that of the Stockholm School of Economics in Riga. As detailed in the case study (Example 28), the mentor club provides high quality free-of-charge mentoring support to business-starters of young companies, prospective SSE Riga students, and aspiring entrepreneurs in Latvia. Mentors help those individuals to develop their business ideas and pursue their business careers.

Example 28. The mentor club, Stockholm School of Economics, Latvia

The mentor club was established by graduates at the Stockholm School of Economics (SSE) in Riga (Latvia) in 2007. The main objective of the club is to provide high quality free-of-charge mentoring support to business-starters of young companies, prospective SSE Riga students and aspiring entrepreneurs in Latvia.

Staff at the mentor club are SSE Riga alumni who have gained significant business and management experience and who are recognised as successful experts in various businesses. They boast a wide range of expertise including knowledge of finance, venture capital management, marketing, advertising, public relations (PR), information-communications technology (ICT), sales, consultancy and production.

The SSE Riga mentor club provides mentoring support to individuals whose companies have growth potential and who have the ambition to pursue their business development. Mentors are usually experienced business persons who provide practical management and business advice, consultation, feedback on various business development scenarios, contacts and possible solutions.

In addition to individual mentoring, the mentor club organises up to 10 meetings a year at which mentors discuss specific up-to-date business issues. Individuals who have been accepted to receive business mentoring support also attend: they make presentations of their companies to the mentors, following which the mentors discuss and analyse each case and its potential development opportunities; following the discussions, a company is matched with a mentor.

Any company interested can apply to provide mentoring. At the moment the SSE Riga mentor club partners and supporters include Swedbank (general partner and sponsor), Eko Investors (development partner), DDB (marketing partner), LETA (information partner) and SSE Riga (administration partner).

In Finland, the HE focused mentoring activity is linked to the urgent need to ameliorate the negative impacts of demographic change. The Lahti University of Applied Sciences has created a programme called Business succession school, linking students with business owners who are looking for a successor. This is a training/mentoring programme for universities of applied sciences, providing the skills to plan and run a controlled transmission of the enterprise to the student, who will be able to continue the profitable business and ensure business regeneration. This practice is now being extended to 10 other universities of applied sciences in Finland. Similar mentoring practice can be found in France.

In Hungary, the Corvinus University organises a business plan competition whose winner is provided with an experienced mentor to help to implement their business plan (NIRAS Consultants et al., 2008).

4.5. Summary assessment of the role of guidance in HE

4.5.1. General assessment

Until recently entrepreneurship was not considered a 'sufficiently' academic topic to be taught in HEIs, nor were universities thought to be the best source of support for individuals who want to start their own business. The skills that students develop within academic institutions were not considered to match those needed to be a successful entrepreneur.

This study, however, has demonstrated that HEIs have the potential to offer education, guidance and support to students that enable them not only to pursue business ventures but also become more entrepreneurial in their approach to life and work more generally.

To be more specific, guidance within higher education has the potential to support the entrepreneurship-related goals of HEIs through supporting students in various stages of their higher education life. Guidance can be used to inform students about the entrepreneurship learning opportunities offered by HEIs, and to help them identify which opportunities are appropriate. Practical, real-life orientated teaching methods have guidance embedded in the learning process, as this type of entrepreneurship education is entrepreneurial in its activity. Many extra-curricular activities have guidance elements integrated in them through the involvement of non-formal guidance providers, such as role models, experienced entrepreneurs and other business professionals. While there is still room for improvement in the availability of actual start-up support, when such support is available, it can be a very effective method of assisting students in the early stages of their entrepreneurial careers.

4.5.2. Formal and non-formal guidance services

Formal career guidance services of HEIs are much more active in entrepreneurship and involved in more diverse ways than guidance services at lower levels of education, including IVET. It is, however, still fair to say that in most HEIs career centres are still more focused on providing information to students about employment positions rather than about self-employment roles. In those countries where career services do offer guidance for entrepreneurship, they usually inform students of the career option and then organise working life familiarisation opportunities, placements or business coaching. Business support is less frequently available in career centres, and guidance professionals themselves do not feel that they are well-equipped to provide this form of

assistance to students. According to the online survey of European guidance practitioners and policy-makers, the proportion of HE students who benefit from formal guidance in entrepreneurship is relatively low in Europe. Most respondents thought that less than a quarter of students benefit from guidance for entrepreneurship.

Entrepreneurship based guidance is more commonly available and present in more diverse forms in Western rather than Eastern European countries. Formal guidance for entrepreneurship in East and South East European countries is still weak and, until recently, provisions in new Member States were relatively rare. However, significant progress has been made in the last two years in many Eastern European HEIs in (e.g. Latvia and Lithuania). Financial shortcomings remain a real problem for HEIs in these countries (e.g. Estonia) and the financial crisis has accentuated this problem. Nonetheless, non-formal guidance activities are available in most European countries, although the number of activities and quality of support varies significantly between countries and within them. European funding, especially ESF, has played an important part in enabling many European countries to invest more in enterprise support (e.g. Greece).

Integrating the enterprise support unit with the career service offer of HEIs is one successful way of mainstreaming entrepreneurship as a means of living, working and learning. This was showed by the example from Newcastle University. The arrangements ensure that the staff of HEI careers services possess expertise in entrepreneurship and that all prospective and current students are informed about available enterprise support and related training.

Successful non-formal (and non-conventional) guidance channels include peer-to-peer methods, such as student entrepreneur clubs, student enterprise ambassadors and opportunities offered by new media (e.g. social networking sites and online student support services). These methods have made a real and immediate impact on entrepreneurial education in HEIs which have used them (see examples from the University of Navarra, Spain and the Norwegian Entrepreneurship Programme).

4.5.3. Opportunities offered by HEIs for entrepreneurial career exploration

Group assignments, real-life case studies and assignments for companies are particularly relevant to today's HE arena. Businesses are the source of the real-life examples and experiences that are essential for student learning. They allow students to become active participants in the entrepreneurial career process; they can see how their personality matches a career as an entrepreneur as the

practical assignments get them to think about their personality, and demands and rewards associated with entrepreneurship.

Another important career exploration tool is internships, especially when they are organised in start-up companies, and supported by pre- and post-placement evaluations that allow students to reflect on the objectives and lessons they have learned. A particularly good example of such an approach that involves student placements in high-tech start-up companies was found in Norway. Many other universities, colleges and polytechnics rely on the same approach, although they may not be equally committed to tailoring the placements to fit the 'entrepreneurship' agenda as such.

One key lesson behind the real-life, 'entrepreneurial' way of teaching and guiding is that it can discourage some students from starting a career as an entrepreneur, as students experience the negative aspects of entrepreneurial career paths. At the same time, it is expected that such learning opportunities teach students to be independent and possess initiative, communication, team-working skills, and a certain level of maturity, as students have had to take responsibility for their own learning.

Dedicated programmes and activities focused on building the confidence and self-efficacy of HE students are still few. This is often expected to be the by-product of many extra-curricular activities and is less frequently the primary focus; instead, many activities seek to build the skills base and raise awareness. The Enterprisers programme from Cambridge University presented an example of good practice in this field.

Business simulations and games are used by HEIs in Europe, though not to the same degree as in upper secondary education.

Business plan/idea competitions and awards have become an established feature in the European HE arena. They are useful in the sense that they drive young people into 'performing to the best of their ability' and pursuing their entrepreneurial ideas. They are also an effective promotional tool as they provide a means of reaching large numbers of students, as award ceremonies are normally associated with a high profile event or a prize.

Both undergraduate and postgraduate degrees on entrepreneurship are still primarily taught in business schools. However, within this study some good practice examples of HEIs have been identified which have taken an interdisciplinary approach to entrepreneurship learning. For example, universities in some countries have started offering modules on entrepreneurship to science and engineering students; similar specialised courses offered to humanities and social science students are, however, still rare. There are even fewer HEIs which have embedded entrepreneurship in the curriculum across all subjects.

4.5.4. Pre-start-up support

Pre-start-up support, especially with a goal of creating high growth companies and helping to commercialise research, is important for HEIs. HEIs also need to engage in providing more business support to students with more advanced business ideas. Business incubators and HE entrepreneurship centres offer a range of technical, practical and even financial support, alongside advice and guidance from experts and business professionals. Incubators/enterprise centres were found in most European countries.

Business advisors employed by careers services can offer vital support by guiding students and graduates through the business planning process, helping them to understand the strengths and weaknesses of their business idea, finding sources of finance, and understanding the principles of intellectual property and company formation. Few examples of HEIs were identified which provide this support in a systematic manner: those HEIs which have a unified careers service/enterprise support unit seem to demonstrate the most cohesive approach (e.g. Newcastle University).

One-to-one mentoring programmes between HE students and experienced entrepreneurs are still rare in Europe.

CHAPTER 5

Guidance support for career management of aspiring and new entrepreneurs

An entrepreneur is usually thought of as someone who is responsive to change, who sees opportunities that others may not see, and who takes risks to mobilise resources to make new opportunities happen. Academic literature on entrepreneurship shows that entrepreneurs often display similar personality traits: they are risk takers, they like being in control, they need to achieve, they are ambitious and they are 'creative' (Envick and Langford, 2000; Llewelly and Wilson, 2003). Such characteristics have contributed to entrepreneurs being described as a 'certain kind of person' (Llewelly and Wilson, 2003).

This view of entrepreneurs implies that entrepreneurial people are born, rather than 'made' (Akola and Heinonen, 2006). However, literature and practical experience suggest that entrepreneurship can be taught, and that a creative environment encourages entrepreneurial thinking. They also suggest that guidance and education for entrepreneurship can stimulate the interest, skills and confidence of people to take a business idea forward.

Each individual entrepreneur has unique skills, competences, strengths, weaknesses, and wishes and aspirations. The development of career management skills can help entrepreneurs to survive and succeed in a challenging/changing business world. Specifically, the assumption is that career management skills can:

- enhance self-awareness and awareness of the changing world of work; self-observation helps to monitor personal and business progress;
- help entrepreneurs to identify their strengths and weaknesses in relation to managing people or a business;
- improve the ability to take responsibility for their own career and personal development;
- strengthen the ability to manage the relationship between work, business and learning throughout all stages of life;
- help to assess when there is a need to seek external advice or expertise to carry out a certain business transaction or overcome a specific problem during the set up phase;
- identify where entrepreneurs can find and access further training to improve their skills in specific areas.

For these reasons, helping both aspiring and new entrepreneurs to develop their career management skills is crucial to new business formation and the development of successful growth-focused businesses. Our research has identified that there are six types of strategy and practice available for both prospective and new entrepreneurs to help them in their early careers. These include:

- mentoring;
- information, advice, coaching and training;
- tv/media and other awareness raising campaigns;
- online career assessment tests for entrepreneurs;
- private sector interventions;
- specific measures for under-represented and disadvantaged groups.

These are discussed on the following pages.

5.1. Mentoring

5.1.1. Background

Research shows that aspiring and new entrepreneurs require tailored and personalised support delivered in a time-effective manner (St-Jean and Audet, 2008). Literature suggests that mentoring at both the pre-start and start-up stages of a business can reduce business failure rates (Cull, 2006). Mentoring schemes for new and aspiring entrepreneurs tend to run over the first 0-36 months of the life of a new business, with meetings held between mentors and mentees every 2-6 weeks. It is usually a one-to-one and face-to-face form of support, although online and group mentoring is increasing (Johnson et al., 2008; Wikholm et al., 2005).

At its best, mentoring can provide a tailored service for new and aspiring entrepreneurs to improve their business and career management skills and learn through action, through the support of a person with extensive business experience. Mentoring constitutes an adaptable and versatile form of guidance/support that can be adjusted to the entrepreneurs' experience, needs, and the specific context and sector within which their firm is operating (St-Jean and Audet, 2009). The *Oslo Agenda for Entrepreneurship Education in Europe* recognises mentoring as a basic element in all entrepreneurship training (European Commission, 2006a).

Typically, mentees have specific individual expectations and needs according to the nature and stage of their business (Gravells, 2006; Wikholm et al., 2008). Personalisation of the mentoring arrangement to an individual's needs

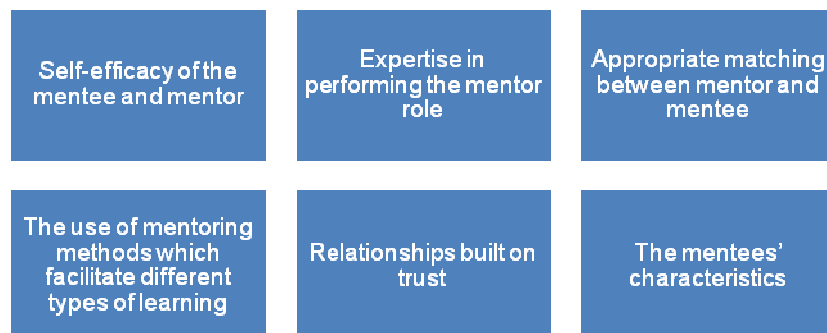
means that the precise nature of the support – and therefore whether it can be described as mentoring – can be blurred (Gravells, 2006).

5.1.2. Successful mentoring relationships

Mentors tend to be older, more experienced self-employed entrepreneurs or executives/senior management who are either still active or recently retired. The stereotypical image of a business mentor is the 'white, male retired bank manager' though evidence from the EQUAL programme illustrate that mentors can come from more diverse backgrounds (Johnson et al., 2008), for example, through unlocking the considerable entrepreneurial skills possessed by those from more disadvantaged backgrounds who are engaged in small-scale commerce.

Successful mentoring relationships are dependent on six features (identified in Figure 12). In addition, clear ground rules on what the mentee/mentor relationship is expected to achieve and the right 'chemistry' play an important role in a successful relationship (Cull, 2006; Gravells, 2006).

Figure 12. **What works in entrepreneurial mentoring relationships**



Self-efficacy of both the mentee and mentor is a key-determinant of a successful mentoring relationship (Pittenger and Heimann, 2000). In mentees it allows them to take full advantage of the developmental opportunities provided by mentoring arrangements (see also Chapter 4.3.2) while for mentors as it helps them embrace all possible opportunities available to the mentee.

The mentor's expertise, experience and availability to perform the mentor role are all important to the success of the mentoring relationship. In particular, mentors should be able to adapt or tailor their approach to the needs of the novice entrepreneur to support the desired learning outcomes (St-Jean and Audet, 2009). Approaches that empower mentees, and that reduce their dependency on their mentor, helping increase their self-confidence, prove particularly successful (Cull, 2006).

Matching mentors to mentees in terms of demographic and sector experience (Wikholm, 2005) or attitudinally, contributes to mentee satisfaction with the support received from their mentors (St-Jean and Audet, 2009). That said, many programmes prefer not to pair a mentor and mentee together from the same type of firm to avoid possible competition and prevent discussions from becoming too technical, which falls outside the scope of mentoring.

Mentoring relationships that go beyond simple verbal exchanges can help mentees develop their understanding of their personal attitudes, values, motivation, self-efficacy and goal setting (St-Jean and Audet, 2008). Explanations of why things work (or do not), the opportunity to question an experienced mentor and the simple process of working with a trusted individual, can assist personal development through affective learning.

Trust is essential in a mentor-mentee relationship, considered necessary to upholding the 'moral contract' which establishes the goals, means, roles, plan of action and timeline for the relationship (Erdem and Aytemur, 2008). Willingness to plan and set goals appears to go hand in hand with trust; these two dimensions appear mutually supportive.

The mentees' own characteristics can affect the success of the relationship; a 'typical' entrepreneur might be characterised as resisting help. The following mentee attributes have been identified (St-Jean and Audet, 2008) as crucial to a solid mentor relationship: openness to feedback; sincerity about one's needs and weaknesses; setting realistic expectations with the mentor; the ability to communicate problems clearly; initiating frequent contact; willingness to discuss failure as well as success; recognition of the importance of mutual respect; and confidence, openness, and readiness to do all that is possible and appropriate to develop a solid relationship.

As well as identifying the key success factors contributing to effective mentoring relationships, it is also important to reflect on problems within mentor-mentee relationships, described as 'toxic mentoring' (Gravells, 2006). If the mentor spends times 'boasting' to the mentee of his/her successes, it presents an unassailable image of success that inhibits the mentee from being open. The relationship will not work if the mentor fails to listen carefully to the needs and situation of the mentee. The mentor should not be too formal or distant and nor should the mentor try to live vicariously through the mentee, becoming too involved in trying to make the mentee business work and setting up unhealthy dependencies.

5.1.3. National programmes

The US was the first country to introduce a national mentoring programme aimed at new entrepreneurs. The programme known as SCORE (<http://www.score.org/>) was introduced by the Small Business Association in 1964 and started its operation with 2 500 voluntary mentors. Today, SCORE is a non-profit association, which builds on the skills of 12 400 volunteer business counsellors who are either working or retired business owners, executives and corporate leaders.

National mentoring programmes are rare in Europe. Some countries do not have any significant activity in this field (i.e. Bulgaria and Latvia). Many countries have adopted a very fragmented approach with local and regional project and pilot activities, but with little coordination. There are 79 mentoring schemes operating in England, with 21 of these programmes operating across England and 58 regionally specific, but the government has done little to coordinate activities in this field.

Sweden is the only European country with a national, state-funded entrepreneurial mentoring programme. In Sweden, the national Mentor Eget Företag (mentor your business) was piloted in 2005; it is now a national programme engaging 2 000 prospective or novice entrepreneurs every year (see Example 29).

Example 29. *Mentor Eget Företag (mentor your business) Sweden*

Mentor Eget Företag was launched as a programme for 200 aspiring and 200 new entrepreneurs in 2006 and is now a national mentoring programme funded by Tillväxtverket, the Swedish Agency for Economic and Regional Growth.

Targeting both new and aspiring entrepreneurs, the mentoring programme is run by two organisations:

- ALMI Företagspartner, a state-owned company which promotes the development of Swedish SMEs and new business creation. The role of the organisation in the programme is to support the engagement of new business owners;
- NyföretagarCentrum (enterprise agencies) is delivered by the Swedish Jobs and Society Foundation, a national umbrella organisation for enterprise agencies that provides professional start-up advice for prospective entrepreneurs. Its role in the programme is to target prospective entrepreneurs who are yet to set up their business.

Mentors and mentees

To qualify for the programme, aspiring entrepreneurs have to have a business concept that has the potential to become a profitable company. New entrepreneurs include business owners with up to three years experience. Mentees drive the mentoring process, determining their support requirements relative to their needs and interests.

The mentors used are either self-employed entrepreneurs or come from senior business management. They commit to working voluntarily with a mentee over a one-year period. Their role in the mentoring process is to act as a sounding board, listen, ask questions, convey knowledge and experience and, when possible, help to build a network of contacts for the mentee.

Mentors and mentees are interviewed and then paired. Mentor/mentee pairs where gender, age, sector and background are mixed, appear to work best. Complementary personal characteristics also seem to work well; for example, a mentee who is ideological can benefit from the help of a mentor who is practical in their approach.

Activities

Mentees and mentors meet monthly during the course of a year, with each meeting lasting around two hours. Mentees are given 'homework' between the sessions so that they can work on the issues discussed in their meetings. The aim of a mentor is to act as a sounding board, listen and ask questions. The mentor should also convey knowledge and experience and where possible, help to build a network of contacts for the mentee. Mentees should not ask their mentor to make decisions on their behalf, but they can ask them for opinions, tips, techniques and tools to reach their own goals. The mentees are in charge of determining how much they can get as it is their needs and interests that should drive the discussions.

Beneficiaries and results

Mentor Eget Företag is now the second largest entrepreneurial mentoring programme in the world, after SCORE, but the largest in the world when the number of mentors is ranked against the number of inhabitants in the country (Wikholm et al., 2008). The programme now involves 1 000 mentees and 1 000 mentors each year. Around 44 000 new businesses are set up in Sweden every year. This means that 2.3% of new businesses benefit from the programme.

A survey of 100 mentors and 100 mentees was carried out in 2007. The survey showed high levels of satisfaction with the programme and highlighted the importance of the programme in the development of mentees' businesses, their skills and entrepreneurial qualities and shaping their business concepts. For example, 90% of new entrepreneurs and 94% of mentors believe that new enterprises develop more quickly with the help of a mentor than without. The mentoring process has helped mentees systematically develop action plans and clear targets for their businesses, exchange ideas with an experienced mentor and extend their business networks.

Mentees believe that the best features of the programme have been the support and guidance provided by the mentor, an opportunity to exchange ideas with someone and an opportunity to extend their network through the relationship with the mentor.

The survey also shows that participation in the programme offers the mentor a concrete opportunity to share their business knowledge and 'feel valued'. Nearly all mentors (98%) would consider recommending the mentoring programme to another colleague or entrepreneur.

The Swedish example presents many important lessons. Most mentees believe that their entrepreneurial qualities have developed as a consequence of the programme, which in turn increases confidence and helps them take control of the development of their own business. The programme also stresses the importance of making sure that the personal qualities of both the mentor and mentee complement one another. The qualifications and experience of potential mentors are important, but equally, and sometimes even more important, is to match a new entrepreneur with a mentor who appreciates what kind of guidance and support the mentee needs and how this can be best provided. This demands empathy, commitment and ability to see 'the bigger picture'.

The Swedish experience has also shown that participation in mentoring programmes gives a great deal of satisfaction to many retired business people, in knowing that their experience and knowledge is being valued. Surveys among mentors and mentees also show that half of senior executives would consider

becoming a mentor, free of charge. Nearly all (98%) of mentors who have already completed a mentoring arrangement with a novice entrepreneur would consider recommending mentoring to their colleague, and 80% of new starters would like a mentor (Wikholm et al., 2008).

It seems important for Member State governments to try and tap into this potential offered by experienced business experts (on a voluntary basis), especially given that large numbers of successful entrepreneurs will be retiring over the next 10 years.

It is also advisable that other Member States consider implementing something that is coordinated centrally, rather than relying on project based, ad hoc interventions alone. Some chambers of commerce and associations representing entrepreneurs are already active, although many of these initiatives are small (e.g. Luxembourg, Slovakia and Finland). Some countries have mentoring activities only for established, high profile businesses (e.g. Ireland). The main reason for the lack of national mentoring programmes is the relatively high cost associated with mentoring, identified in particular by the Irish and British stakeholders.

Many countries have focused on mentoring for specific groups of potential entrepreneurs. For example, ESF and EQUAL funding has been used to experiment with mentoring and/or business coaching with disadvantaged groups and the unemployed, with such arrangements for women also fairly common. Examples of women entrepreneur projects can be found in countries such as Belgium, Germany, Spain, Portugal, Finland and the UK. The Small business mentoring programme (*Das 'small business mentoring' Programme*) was set up by the National Agency for Female Entrepreneurs (*Bundesweite Gründerinnen-agentur*, BGA) in cooperation with the American Express Foundation. It ran from 2006 to 2007 in eight German federal states. The programme aimed to help women who had an immigrant background, who were unemployed, who were older, or who were returning to work after having children, to become self-employed through the support of a specialised mentoring programme ⁽²⁶⁾.

5.1.4. European programme

Europe has had its own transnational mentoring programme in place since February 2009. Erasmus for Young Entrepreneurs is a pilot project launched by the European Union. The aim is to help young entrepreneurs (i.e. would-be entrepreneurs and individuals who recently started a business) to acquire relevant skills for managing a SME by spending time with an experienced

⁽²⁶⁾ Available from Internet: <http://www.gruenderinnenagentur.de/bga/Beratung/Mentoring/index.php> [cited 27.8.2010].

entrepreneur in another EU country. The programme seeks to improve the know-how of new entrepreneurs and promote cross-border exchanges of training and experience between entrepreneurs ⁽²⁷⁾.

The budget of the programme for 2010 to 2011 is EUR 5 million and the target in terms of beneficiaries is 1 200 exchanges for the same year. At the moment the number of exchanges is still significantly below the target but the number of beneficiaries is growing and the programme has an important symbolic value in terms of promoting mobility and entrepreneurship in Europe, especially in the context of the Europe 2020 priorities. The European Union has over 20 years of experience in implementing EU mobility programmes but this is the first specifically targeting entrepreneurs. It has an important role in highlighting the need to offer mentoring and shadowing opportunities for young people interested in a career as an entrepreneur (see case study on Erasmus for Young Entrepreneurs for further information).

5.1.5. Online services

Online mentoring programmes are another way of supporting both aspiring and new entrepreneurs. They offer a resource-efficient way of providing advice and guidance to new and aspiring entrepreneurs. Many find it appealing as mentors generally carry out their activities on a voluntary basis, which is clearly more cost effective for new entrepreneurs than using business coaches. The provision of advice via the internet also makes online mentoring less demanding for both the mentor and the mentee, which means they could also be more likely to pursue the mentoring relationship over the longer term. At the same time, there are both new and experienced entrepreneurs to whom this approach does not appeal as it lacks the direct 'human element' and is less likely to provide as all-encompassing a service as face-to-face mentoring. The preferred approach might be one that combines both online and face-to-face mentoring.

Online mentoring tools were identified in Portugal and the UK. The 'Netmentor' is especially targeted at individuals who are considered to live in hard-to-reach areas (see Example 30).

⁽²⁷⁾ Erasmus for Young Entrepreneurs official website, <http://www.erasmus-entrepreneurs.eu/page.php?cid=02> [cited 5.5.2010].

Example 30. Netmentor, Portugal

NetMentor is an internet-based tool created to support both new and more established entrepreneurs. Its aim is to make it easier for those in isolated areas and with poor transport links to have contact with business advisors, allowing the target groups to access quality advice and training from their own home. The main target groups consist of women with caring responsibilities who find it difficult to travel, entrepreneurs in rural areas, and, young people without access to transport.

NetMentor aids discussions and exchanges of information between mentees and mentors. It also collects business information through an extranet linked to an Excel document. This creates a database which enables regularly updated information on accountancy and other business issues to be accessed and shared by users.

Advisers and mentors are also able to build up an electronic store of knowledge about the opportunities and risks of business creation in particular sectors which will in turn improve the quality of the advice that mentors can give to new entrepreneurs. It also helps to compare the performance of potential start-ups from the same sector at a local level.

5.1.6. Mentoring and career management skills

Our research, interviews and the Swedish case suggest that the potential benefits of mentoring go beyond business management skills. Mentoring has the potential to support the career management skills of aspiring and novice entrepreneurs by helping them to:

- understand which management and generic business styles come naturally to them and what aspects are or can be a struggle;
- understand how other entrepreneurs network, think and learn;
- improve their ability to learn, deal with changes in internal and external circumstances of their business and career, and overcome problems;
- understand and appreciate their potential as an entrepreneur, including providing tools and building the confidence required to 'step-out' and start or continue a career as an entrepreneur, or to close down their company if it is deemed to be the right option;
- understand their readiness for a career as an entrepreneur, including the socialisation and orientation aspects of an entrepreneurial career;
- become more aware of the opportunities for help, advice, grants, loans and networks available to support them in their entrepreneurial career, and what needs to be done to access them.
- improve their business and managerial performance, by adding value to the original business idea or model, stimulating thinking and providing reality checks; also becoming more organised, practical, realistic and target-driven;
- provide a listening ear when they need to talk something through or consider ideas with someone.

5.2. Information, advice, coaching and training

Both prospective and novice entrepreneurs can benefit from expert information and advice on the early stages of their entrepreneurial careers. Information and advice is typically provided by:

- chambers of commerce and associations representing entrepreneurs/SMEs;
- public employment services (PES);
- business support networks (such as Business Link in the UK, Nyföretag network in Sweden, etc.);
- online services.

Business advisers are usually employed by such service providers to offer information, business support and contacts. Business advisors are not business coaches or mentors, but instead help prospective and new entrepreneurs to identify their needs and challenges, and then introduce them to other individuals or organisations who can help them further (Thompson and Downing, 2006). Fundamentally they have a brokerage function and their services can be offered through one-to-one tuition, group advice and large seminars (Johnson et al., 2008). Primarily, general advice is provided free of charge, especially for aspiring and new entrepreneurs, while there can be a charge for specialist services. In some cases (e.g. in the context of associations of entrepreneurs), business support may be only available for members.

Individuals providing information, advice and business support hold a range of qualifications and their expertise varies greatly from one individual to another. Some are trained guidance counsellors but most are recruited to such posts due to the business experience they possess.

5.2.1. Chambers and associations of entrepreneurs

Many chambers of commerce and associations representing entrepreneurs employ advisers whose role is to support entrepreneurs with the questions relating to their business. Typically advice focuses on financial, regulatory and training challenges. Advisers also help entrepreneurs with networking and signposting to specialist advisers when necessary.

5.2.2. Public employment services

Public employment services (PES) in the Member States offer different levels of support and guidance to individuals who aspire to set up their own business. The type and depth of support and guidance provided depends on the PES service delivery models and whether aspiring entrepreneurs are considered as core clientele. Some PES provide separate services such as training, written

information on their website, or merely act as a referral agency to other specialist organisations, while others provide an integrated service that combines several different elements and types of support and guidance.

The service delivery models primarily consist of referrals to specialist agencies, information provision or integrated support and guidance service comprising several types of support and guidance. For example:

- in Denmark, Luxembourg, Romania and the United Kingdom, aspiring entrepreneurs are referred to a specialist agency with no service provision within the PES;
- in Spain, all information is provided on the PES website; the PES does not provide any other services to aspiring entrepreneurs;
- in Finland and Sweden, a combination of one-to-one adviser support, provision of internal training courses, written material on setting up own business and referrals to specialist agencies are delivered;
- in Ireland, the service offer combines internal training programmes with referrals to specialist agencies, whereas in Malta, training courses are provided without the referral to specialist agencies.

5.2.3. Business support networks

Business support networks are run by national, regional and local authorities and organisations such as ministries and other authorities with responsibility for business or economic development, chambers of commerce, and business organisations. Their primary goal is to help new business owners with finance and grants, taxes, payroll and employment issues, sales and marketing, etc. While their focus tends to be on technical and practical matters, they also help to signpost entrepreneurs towards more specialist services, inform about appropriate training opportunities and provide general advice. Many networks also manage programmes of events for personal and business development. Such activities can help entrepreneurs to network with potential business partners and establish contacts with their peers.

Regional consultancy information centres (RCIC) in the Czech Republic offer introductory advice free of charge to SMEs as well as business consultancy services at a reduced cost. They provide assistance in drawing up business plans and implementing projects, arranging bank loans and job creation. There are 35 county and city enterprise boards (CEBs) in Ireland located throughout the country. Their role is to provide support for micro-enterprises in start-up and expansion phases, to promote and develop indigenous micro-enterprise potential and to stimulate economic activity and entrepreneurship locally. Similar business support networks include Business Gateway in Scotland, Gründer-Service in

Austria, Uusyrittäjyyskeskus in Finland, Center for Entrepreneurship and Executive Development (CEED) in Slovenia and the Enterprise Europe Network Hellas in Greece.

In Sweden, around 15 000 people are involved with the new business support network NyföretagarCentrum each year, with two out of three starting up their own business within two years of receiving the advice. More than 80% of those who start their business with the support of NyföretagarCentrum are still operating after three years and less than 1% of those go bankrupt after three years ⁽²⁸⁾.

5.2.4. Online services

Online business support tools provide information and guidance to aspiring and novice entrepreneurs through various different methods, via the internet. They have the potential to be a cost-effective way of reaching out to a wide and diverse target audience. Examples of these tools were found in Austria, Germany, Iceland, Portugal, Spain, Sweden and the UK. The tools are often hosted on websites or platforms which provide a variety of services and can be national or regional in focus. Some also are tailored to entrepreneurs in specific sectors.

Many interactive enterprise platforms provide one-to-one guidance over the internet for individuals are running a business, developing a business idea or on the verge of starting up their company. The guidance is provided by experts and experienced entrepreneurs. They can have specific questions answered in a clear and quick manner, rather than having to search different sites for the information required. The answers given by the experts can give them confidence to make the decisions they were hesitant to make without hearing a second opinion. They do not have to make or attend an appointment and, in the examples we have identified, they are not charged for the guidance provided by the experts.

Examples of this type of tool can be found in Iceland, Spain and the UK. In Germany, the users of the Business start-up portal are able to choose which expert should answer his/ her query, depending on the topic.

⁽²⁸⁾ Available from Internet: <http://www.nyforetagarcentrum.com/> [cited 14.05.2010].

Example 31. **Business start-up portal**

The Business start-up portal was developed by the Federal Ministry for Economics and Technology (*Bundesministeriums für Wirtschaft und Technologie*, BMWi) for those seeking information on starting up a business.

The portal includes an expert forum, with a team of experts who are able to answer the questions of new and aspiring entrepreneurs who use the site. This tool requires the user to send their question to their chosen expert from the forum. The user must first select a theme from a list displayed on the site. Once the theme is selected the user will see a list of experts and a selection of questions that they have previously answered. The user can select the expert they feel is most appropriate to their query and then input and send their question via e-mail. A response is then sent by email within three working days.

Online tools to support the development of a business plan or idea are mainly aimed at those entrepreneurs who are in the initial stages of setting up a business and need extra help and guidance to expand their ideas. Such tools can test the feasibility of a business idea. Examples of this type of tool are found in Spain and Austria. For example, the Austrian website, 'i2b & GO!' ('Ideas to business'), was launched in 2000 by the Austrian Chamber of Commerce (see Example 32).

Example 32. **i2b & GO! Businessplan-Wettbewerb**

The 'i2b & GO! Businessplan-Wettbewerb' website is aimed at individuals in the process of developing a business plan. The overall goal of the site is to increase the success rate of new businesses by providing detailed guidance in the early formation of a business plan.

In order to gain feedback on their business plan, individuals must register on the website and upload their plan. Within five weeks of uploading their plan they receive, free of charge, two separate sets of written feedback from independent experts. The network of experts is made up of 127 individuals from across Austria with expertise in start-ups, promotion and financing. Entrepreneurs can also contact experts independently for help and advice.

There is also a handbook available to download from the website (*Keine Angst vor dem Businessplan, Ein Handbuch für Gründerinnen und Gründer*). The handbook includes detailed explanations of all the components of a business plan, common errors to avoid, recommended literature and important websites.

The website provides a variety of other free services that can positively contribute to developing a business plan. These services include a template for developing a plan, information about local coaching evenings and tutorials on technical issues related to business start-ups, and a list of other available business tools and contacts.

Users of the site can also take part in the i2b & GO! Business plan competition by entering their final business plan.

Blogs, online forums and networks of new and aspiring entrepreneurs have also been established as a form of peer-to-peer support. They enable new business owners to communicate with their peers and provide each other with valuable support and guidance. The rationale for these tools is that many new and aspiring entrepreneurs will find they face the same problems and challenges.

Communication between individuals and groups with similar experiences will help new business owners to overcome their problems. They can share information on what they have learned from their own experiences, for example in terms of mistakes they have made and how they overcame them. Seeing how others have succeeded in setting up and running a business can also be inspiring and provide the motivation to users to progress their plans.

The If we can, you can web portal ⁽²⁹⁾ allows users to see what their peers are doing and thus compare their own experiences with those of their peers and/or develop ideas for their own business. The portal includes a blog where information is regularly updated with news of the members of the portal.

5.2.5. Training

Training courses on entrepreneurship are usually non-formal and aimed at an adult audience, usually those with strong intention or aspiration to set up their own business. Such courses typically cover business development (searching for business opportunities, planning, decision-making) and management (financial management, sales, managing people) skills but can also address other 'enterprising' skills, such as self-assessment and awareness, communication and seeking advice from others (White and Kenyon, 2001).

5.3. TV/media and awareness-raising campaigns

There are a number of channels through which key messages on entrepreneurship can be disseminated. Using different media, such as television and radio, provides the opportunity to reach a large audience, to raise the profile of entrepreneurship across Europe and to raise awareness of it as a viable career path. Awareness-raising methods can (European Commission, 2007):

- raise a broader awareness and increase people's interest in entrepreneurship. Programmes can get people who have never thought of self-employment to consider it as an option;
- improve the image of entrepreneurship (in terms of the risks associated with being self-employed) and the image of entrepreneurs;
- convey ideas about what entrepreneurial life is like, the problems and solutions, benefits and risks;

⁽²⁹⁾ Available from Internet: <http://www.ifwecanyoucan.co.uk/> [cited 20.9.2010].

- convey specific practical information about different aspects of entrepreneurship, e.g. procedures for starting up a company or how to access state support for self-employed people.

Television in particular, allows the subject of entrepreneurship to be portrayed in an interesting and engaging way, with role models presented to attract people, especially the young, to the path of entrepreneurship. Besides showing what being an entrepreneur could be like, TV can also provide factual information in an entertaining and easily understandable way.

Different types of TV programme have different strengths and attract different audiences. Reports best convey factual information and can react quickly to new developments, but are likely to only be viewed by people who are already entrepreneurs or those who are seriously considering this option. For example, every episode of the programme *Firma* in Poland shows step-by-step how to start a particular type of business, how much money needs to be invested, which regulations have to be observed, which equipment is necessary and how much one can expect to earn.

Documentaries on famous business people can glamorise self-employment and offer inspiration. To make entrepreneurship seem a feasible option, documentaries of ordinary people setting up a business are important. TV reaches a very large audience, but may not offer a very realistic or positive image of entrepreneurs.

Docu-soaps that follow the life of entrepreneurs are a good way to show what entrepreneurship means in reality. While programmes about exceptional entrepreneurs can be inspiring, there are several 'docu-soaps' on normal self-employed people that are very important in showing that entrepreneurship is something feasible and a viable career opportunity for many people that does not automatically involve heroic efforts or big sacrifices. One example is *The Hustlers*, UK ⁽³⁰⁾ which depicts the journeys of five entrepreneurs in the arts, media and fashion industry who set up businesses in the North of England where traditionally the focus for businesses has been on industrial services. Another series, described in Example 33, that not only shows the daily life of ordinary entrepreneurs but generates interest through being interactive is *Dvanáct odvážných* (The Courageous Twelve) in the Czech Republic.

⁽³⁰⁾ Available from Internet: <http://www.channel4.com/programmes/the-hustlers> [cited 20.9.2010].

Example 33. The Courageous Twelve, Czech Republic

The Courageous Twelve (*Dvanáct odvážných*) programme tells the stories of 12 entrepreneurs who have overcome certain obstacles to succeed in the business world. Nomination of entrepreneurs is made by the public with the final selection made by the Vodafone Company, which produces the programme. It is a good example of the third way (see introduction) of how businesses can promote entrepreneurship. This programme is popular, with each episode drawing around 400 000 viewers.

Contests among would-be entrepreneurs are relatively new and immensely popular, attracting a wide audience. In a light-hearted way they get across the opportunities of an entrepreneurial career and create greater awareness of what is involved in a business idea. For example, Skaperen (Creator) ⁽³¹⁾ searches for the best business idea in Norway. Auditions are held and 15 finalists are selected to present their business idea on the programme; participants must encourage viewers to vote for their ideas. Every week a contestant is eliminated and, in the last show, viewers vote for their favourite business idea; the winning contestant receives NOK 1 million (EUR 120 000). The programme was produced in cooperation with Innovation Norway, the national business support organisation funded by the Ministry of Trade and Industry. Similar programmes can be found in Finland, Ireland, Norway, Portugal, Spain and the UK (e.g. AUDAX Negócios à Prova, Business Challenges AUDAX) ⁽³²⁾ in Portugal and Generación XXI ⁽³³⁾ in Spain.

Alongside television programmes based on the subjects and principles of entrepreneurship, there are also a small number of radio programmes. In Lithuania, there are several radio programmes that specifically address business-related themes (e.g. *Verslo dvasia*, Entrepreneurship spirit, a discussion programme about entrepreneurship).

There are also many occasions that celebrate entrepreneurship in various countries (Bulgaria, Ireland, Spain, Sweden and the UK). For example, the Entrepreneurs' day ⁽³⁴⁾, in Spain is a nationwide event that enables entrepreneurs to share knowledge, experiences and best practice. At a European level, the European SME Week ⁽³⁵⁾, began in 2009, as a campaign to promote entrepreneurship. The SME week in 2009 saw over 1 200 national, regional and local events focusing on a variety of topics.

⁽³¹⁾ Available from Internet: <http://www.innovasjon Norge.no/Prosjekter/Skaperen/> [cited 20.9.2010].

⁽³²⁾ Available from Internet: <http://www.audax.tv/Concurso/Regulamento/tabid/64/Default.aspx> [cited 20.9.2010].

⁽³³⁾ Available from Internet: http://www.emprender-en-aragon.es/paginas/seccion_Concurso%20Generacion%20XXI.htm [cited 20.9.2010].

⁽³⁴⁾ Available from Internet: <http://www.emprendemosjuntos.es/es-ES/diadelemprendedor/Paginas/DiaEmprendedor.aspx> [cited 2.9.2010].

⁽³⁵⁾ Available from Internet: http://ec.europa.eu/enterprise/policies/entrepreneurship/sme-week/index_en.htm [cited 20.9.2010].

Dedicated enterprise ambassadors are another way of stimulating entrepreneurship in schools, universities, community groups and the media. The ambassadors demonstrate, through their own experience, that a career as a business owner is a feasible and attractive option. In Sweden, more than 800 women's entrepreneurship ambassadors have been appointed to make women's entrepreneurship more visible (Tillväxtverket, 2009).

5.4. Online career assessment tests

There are various self-management strategies, tools and practices that can be helpful to the career development of aspiring and new entrepreneurs. Often available online, they provide a means by which the aspiring and new entrepreneurs can focus their efforts, understand the skills they need and what steps they have to take to develop them and whether they are suited to a career as an entrepreneur.

One of the many types of online career and self-management tools available for aspiring and new entrepreneurs is online career assessment tests. These range from tests to establish how an individual personality and skills set maps against the skills, competences and attitudes required to pursue a career as an entrepreneur, to tests for already established entrepreneurs to check their 'entrepreneurial skills' and ascertain areas for future development. The tests usually consist of questionnaires that allow users to gain an impression or indication of their entrepreneurial qualities, for example, using a series of questions or profiles. Some are aimed at specific target groups such as aspiring entrepreneurs, those who already have their own business, young or female entrepreneurs. Others are much more generic.

Evidence suggests that the number of online career and self-assessment tests available for both would-be and current entrepreneurs is increasing. They are being developed and administered by a growing range of partners, primarily associations representing entrepreneurs and/or organisations promoting entrepreneurship. However, a growing number of 'commercial' tests were found (i.e. tests developed by commercially-oriented websites and/or companies), especially in the Netherlands and the UK.

The variety of tests available for entrepreneurs can be differentiated into four categories that:

- examine the users' personality traits in relation to a career as an entrepreneur;
- assess entrepreneurial skills and competences of would-be or current entrepreneurs, and seek to identify training needs;

- provide a comparison to successful entrepreneurs;
- act as a reflection tool.

Some self-assessment tests fall under a number of the above categories. They have been categorised below according to the element that is strongest within each test.

Personality tests that establish if the user is suited to a career as an entrepreneur are typically aimed at aspiring entrepreneurs. They tend to pose questions regarding their suitability to run a business and the likelihood of future success. The aim of these tests is to make aspiring entrepreneurs aware of the pressures and challenges that new entrepreneurs face while the rationale for them is that business success rates improve when aspiring and new entrepreneurs are prepared.

Examples of personality tests for aspiring entrepreneurs were found in Spain and UK, as well as international examples of such tests. The British online business journal Businesswings (www.businesswings.co.uk) has an established Entrepreneur personality test. It seeks to help would-be entrepreneurs by asking them to question their personal characteristics and abilities, financial situation, and the relevance of their skill-base.

Entrepreneurial skills tests help users identify existing skills and those that they need to develop. Skills tests often prompt users to identify the skills and competences that they believe are important for an entrepreneur they are based on the examples identified and often include elements of personality testing. Such tests are one of the more common self-assessment methods for entrepreneurs in countries such as Austria, Germany, Spain Netherlands and Finland. The Spanish Ministry of Industry, Tourism and Trade has developed a Self-assessment of entrepreneurial attitudes test (*Autodiagnóstico de Actitudes Emprendedoras*). The test comprises 25 closed questions on seven areas that relate to the skills of an entrepreneur; it results in an assessment of entrepreneurial attitudes and provides recommendations for future action.

The Finnish financing company Finnvera has developed an entrepreneur test, *Yrittäjätesti*, for aspiring entrepreneurs (see Example 34). What differentiates this test from others is that it is accompanied by a film that guides individuals through the test. The film offers background information on the questions posed and provides an insight into being an entrepreneur. It also directs users towards organisations to help entrepreneurs and additional information sources.

Example 34. Entrepreneur test (*Yrittäjätesti*), Finland

Finnvera plc is a specialised financing company owned by the State of Finland. It provides its clients with loans, guarantees, venture capital investments and export credit guarantees.

The Finnvera personality test is available on its website. The test requires the user to have an idea of the type of business they are interested in setting up. It starts with an introduction to being an entrepreneur and seeks to clarify any myths. Individuals are guided through the test by an interactive film, which pops up before and after each question. The accompanying film provides information as well as encouraging users to think about their answers alongside their aspirations, key strengths and weaknesses. It also aims to see how well prepared individuals are to set up their own business.

At the end of the test, individuals are provided with an entrepreneur profile. The profile comprises:

- a summary of their strengths in relation to being an entrepreneur;
- training and development needs;
- key challenges and barriers to success;
- an estimate of the time needed to run the type of business they have in mind;
- required income to set up the business they have in mind, and information on profitability and cash flow;
- information about the business idea (i.e. services/products of the company and how customers are going to benefit from it), main competitors and unique selling points.

In Austria, a similar test was developed by psychologists for the Federal Economic Chamber. Some of the questions ask users their opinions on the best action to take in fictional situations. Participants first answer some general questions about themselves (gender, age, education, location) then move on to 60 multiple-choice questions that explore their motivations in becoming an entrepreneur and determine the best action to take in a fictional situation.

Comparative tests allow the user to compare themselves against successful entrepreneurs and identify if they are on the path to becoming successful entrepreneurs. This kind of test can be found in Spain and the Netherlands. A Spanish example maps a users profile relative to the experiences of 150 successful entrepreneurs (see Example 35).

Example 35. Entrepreneur self-diagnosis, Spain

The Entrepreneur self-diagnosis (*Autodiagnóstico emprendedor*) test, on the *Emprendedores* website tests aspiring entrepreneurs' strengths and weaknesses. Experts from the Autonomous University of Madrid (UAM) created a tool to test the skills of those who want to become entrepreneurs based on the experiences of 150 successful entrepreneurs.

The test consists of 25 questions that focus their attention on qualities needed to develop a business. After completing the questions the site will calculate the result and identify what stage the user has reached as follows:

- their idea needs further development;
- they are almost ready to become an entrepreneur, they need to think about the reason for starting a business;
- they are ready to become an entrepreneur, they are committed to the project.

Reflection tests differ from the career management tests described above as they use open ended questions to aid the reflection process. These tests are aimed at both would-be and existing entrepreneurs. A test developed by Almi in Sweden encourages new and aspiring entrepreneurs to develop a clear understanding of their business idea and to reflect on certain aspects of the business ⁽³⁶⁾. It comprises three sections. The thinking section asks the user to assess their business idea and consider the possible profitability of the project. The preparation section encourages the user to formulate their business idea by identifying issues for the user to think through using a business start-up checklist. The early years section allows users to focus on issues such as the external factors that affect the company and how to balance personal life and business.

It is important to be aware that there are many tests where methods or results have not been scientifically tested. This means that many can only provide an impression of the individual's characteristics or skills and the results should be seen as indicative only. Few tests offer any personalised support in a form of telephone helplines or question or answer service. For these reasons, they should be seen as one of many helpful methods available to improve career and self-management skills of entrepreneurs (rather than as one critical one) and their strength lies in the fact that they tend to be easily-accessible and inexpensive.

5.5. Private sector interventions

Private sector structures such as business incubators, venture capital companies and business parks are involved in providing support for prospective and novice entrepreneurs, and they have a pivotal role to play in this process. Experienced entrepreneurs start new businesses 'habitually and serially' by acting as investors in other start-ups (Thompson and Downing, 2006). In this way they coach and mentor other new entrepreneurs without any public funding, while continuing to run their own companies. Some venture capitalists and business parks also appoint mentors for new starters (i.e. their own experienced members of staff) to protect their investment. These are not formal mentoring arrangements but they are significant to the entrepreneurship context. Another common feature is that the entrepreneurs and their private partners share the same goal: to succeed in the entrepreneurial effort, as both have invested in the venture.

⁽³⁶⁾ Available from Internet: <http://www.almi.se/Nyforetagande/> [cited 1.2.2010].

Much of the guidance linked to private initiatives is informal and not structured as such. It is practical, action-oriented and directly linked to the new business, rather than guidance in a broader sense. There is also little evidence of 'holistic' support – addressing career management skills – although the contact between the novice entrepreneurs and their mentor/coaches/investors is regular.

Biocant Business Park in Portugal provides a description of typical support activities of a private seed funding company (see Example 36). It supports researchers with projects at the ideas stage to develop their business strategies.

Example 36. **Biocant Business Park, Portugal**

Biocant Business Park, in the Coimbra region of Portugal, is the country's first biotechnology business park. The park also provides research services for pharmaceutical, diagnostic, biotechnology, environmental and agricultural industries. Fifteen companies on the park employ around 137 people, with a further 17 individuals involved in park administration. Established in 2006, Biocant Ventures (BV) is a seed funding company that helps new entrepreneurs develop their business and strategic plans, build their networks and develop links with investors and buyers. BV is a partnership of three companies and it tests and validates early stage business ideas emerging from biotechnology projects that cannot be legally supported by venture capitalists.

Typically, applicants present their idea or business plan to the BV management team, who evaluate it and undertake a financial and commercial analysis. BV receives around 30 applications per annum and is currently supporting six projects in the food industry, biomedical devices, drug (pharmaceutical) discovery and analysis services.

BV supports researchers with projects at the ideas stage to develop their business strategies. Much of the support provided is informal as the company does not provide 'structured' or 'formal' business mentoring, coaching or training. Support can help with:

- the logistics of setting up and operating a business;
- developing the skills needed to present their plans to potential investors;
- linking projects/start-ups to other companies (e.g. putting in place supply chain links).

The two BV directors spend around one day each per week, providing support to the start-up projects/companies they are working with. New entrepreneurs can take part in publicly funded entrepreneurial learning opportunities.

Entrepreneurs in receipt of funding from BV are usually young PhD graduates. Most are working on their first commercial project; five are men and two are women.

To date only two projects have reached the commercial stage. These companies are currently presenting their projects to companies for commercial investment so it is too soon to draw conclusions about the effectiveness of BV support and its impact on start-up success or failure rates.

The example from Portugal supports the finding that private companies independently provide support to entrepreneurs, without funding, alongside their main business activity: the directors of BV venture capital company evaluate business ideas financially and commercially and commit one day per week to support start-up companies and projects. This time commitment and company knowledge of the sectors and markets involved is invaluable to entrepreneurs in commercialising their ideas.

5.6. Guidance for specific groups

Self-employment provides a route through which people identified as marginalised or disadvantaged can actively engage with the labour market and/or the economy. While guidance and support for groups such as women, young people, immigrants and ethnic minorities, and the unemployed or low skilled mirrors that delivered to aspiring and new entrepreneurs in general, efforts also need to focus on raising awareness of available activities through outreach.

This section identifies the types of activity developed via programmes typically oriented towards marginalised, disadvantaged or underrepresented groups.

5.6.1. Migrant entrepreneurs

While migrant entrepreneurs are likely to face the same sorts of difficulty as any person trying to set up their own business, the following specific barriers exist:

- restricted access to financial and institutional support services;
- language barriers;
- limited business, management and marketing skills;
- disproportionate concentration in low-skilled activities where the scope for growth, diversification or entry into mainstream markets is limited.

Even though certain migrant communities are noted for their entrepreneurial activities, limited business, management and marketing skills are identified as barriers to establishing one's own business. Findings from a report by Middlesex University from 2000 also identified that migrants access general management skills and business support less frequently and are more likely to rely on informal sources of assistance (CEEDR, 2000) ⁽³⁷⁾. However, there is a danger that informal sources of advice (family and friends) can be misinformed, hampering individuals' efforts to start their own businesses. Migrant entrepreneurs might also be less likely to utilise wider marketing techniques, as they often form a niche market within their community or locale.

Despite such problems and constraints, successful programmes exist that deliver guidance and support to migrant communities.

Migrant populations might be more likely to rely on support from family and friends rather than expert guidance and they are less likely to have access to the kind of support provided by authorities and institutions. It is imperative that targeted business support services come up with innovative ways of reaching these clients.

⁽³⁷⁾ These are likely to be friends, family or other personal contacts.

One successful approach is to set up offices in the middle of the hard-to-reach communities, while at the same time creating a style attractive to the target public with good referral networks. For example, in order to set up the Copenhagen Business Centre, the project officers first spent six months of intensive outreach in targeting particular areas of the shopping district of the city that are dominated by migrant populations. In doing so it managed to create the trust and rapport necessary to encourage its target clients to attend the business centre when it opened ⁽³⁸⁾.

Another approach is to train local NGO's to provide business advice, thereby, building on the trust they have acquired within their communities. An EQUAL project from France targeted migrants living in the deprived Parisian suburbs who principally come from sub-Saharan Africa, are illiterate and have been working in the informal economy. ADIE ⁽³⁹⁾ used links within the communities and word-of-mouth contacts to reach out to members of the community (principally women) and encourage them to bring their traditional activities such as crafts production into the mainstream.

Other examples of such outreach work are illustrated in Example 37.

Example 37. **Business support outreach projects funded by EQUAL Initiative**

Bridge (Hungary):

- staff on the Bridge project managed to reach the target Roma community by working through the local community council.

Faith in business project (London, UK):

- pastors in African Caribbean Baptist churches help inform African and Caribbean migrants in their congregations about community business support resources.

Transformando (Madrid, Spain):

- staff engage with migrant communities on the street. They try to attract potential clients who would not be prepared to come into a formal office and identity or nationality papers are not requested. The project is based on a respectful and proactive attitude and further clients are recruited by word-of-mouth.

Another way of supporting migrant entrepreneurs includes holistic, business incubator types of environment, offering services that help young businesses to grow. Statistics show that they are very successful in improving survival rates, raising the three-year survival rate of new business from 50% to 85% (Johnson et al., 2008). Positive and recognisable role models also help to encourage new and diverse people into the entrepreneurial sector, so awareness-raising and media support can help significantly with this.

⁽³⁸⁾ Available from Internet:

<https://webgate.ec.europa.eu/equal/jsp/dpComplete.jsp?cip=DK&national=42> [cited 28.8.2010].

⁽³⁹⁾ Available from Internet: <http://www.adie.org/> [cited 28.8.2010].

5.6.2. Women

Women have specific guidance needs because of the 'gendered' barriers they face in setting up businesses. Appropriate guidance can also significantly increase the survival rate of companies set up by female entrepreneurs. In Germany, for example, training designed specifically for women led to business survival rates of around 80% compared to an average of 30% on normal courses (Johnson et al., 2008).

For this reason, a number of studies indicate that women who are aspiring to be entrepreneurs need support specifically targeted at women such as financial incentives, mentoring, links to business networks, and role models. Women can experience difficulties in dealing with banks and entering informal financial networks, so they need information and guidance on business finance. The balancing act related to the reconciliation family and work life is another barrier for some potential women entrepreneurs. The lack of access to networks that provide information, advice, and business contacts is another concern, and links to business networks, contacts and peer support are vital. More than anything, many women lack a belief in their own skills as entrepreneurs: female entrepreneur role models may be an effective method of showing that women can be skilled and successful in 'doing' business.

A study in the UK found that prospective women entrepreneurs need appropriate finance mentoring and coaching and access to 'networks' or social capital (Prowess National Policy Centre, 2008). They also need greater incentives to move into enterprise than their male counterparts: these may include measures such as role models, as well as tax relief on childcare. Research has shown that women find mentoring, in particular, attractive, preferring more 'transformational' support which is long-term, relational and holistic' (ibid.). Mentoring support for women was found to be most effective when provided by peers, and when mentors were experienced and well-connected, matched carefully to their mentees, and when e-mentoring was complemented by face-to-face support (ibid.).

5.7. Summary of ways to improve career management

5.7.1. General assessment

This chapter discovered that there are various self-management and guidance strategies, tools and practices available that can be helpful to the career development of aspiring and new entrepreneurs. Sometimes the impact of such interventions on the career management skills of entrepreneurs is direct (e.g. in

the case mentoring) while in others it is indirect (e.g. in the case of media activities, and information and advice services offered by business advisers and coaches). Much of the guidance is provided through non-formal means by individuals with greater enterprise, rather than career guidance, expertise.

Career management skills help novice and prospective entrepreneurs to understand and appreciate their potential as an entrepreneur and how other entrepreneurs network, think and learn. CMSs also improve the ability to learn, deal with changes in business and career, and to overcome problems. Career management skills also have a practical dimension. They help entrepreneurs to become more aware of the opportunities for support, advice, grants, loans and networks and what needs to be done to access them. Career management skills are important to new business formation, sustainability and growth.

5.7.2. Successful practices

Mentoring arrangements are seen as one of the most effective, though not yet widely available across Europe. There is an acute shortage of well-coordinated and facilitated mentoring services for entrepreneurs. Evidence from literature and case studies illustrates that entrepreneurial mentoring arrangements can yield many benefits to prospective and new entrepreneurs related to their career management skills. Through the mentoring relationship, the aspiring and new entrepreneurs are able to develop both professionally and personally. Mentors encourage novice entrepreneurs to think and learn from their own actions in critical situations, with the result being either a change in their behaviour or drawing out of lessons. Mentoring allows entrepreneurs to examine their (prospective) companies from a more objective standpoint, while continuing to play a role as a leader and think about its development. Mentoring is particularly useful in the transfer of knowledge about the business world and the development of entrepreneurial skills.

Networking can improve the ability to identify available opportunities for personal, professional and/or business activities and understand the 'bigger picture' such as a broad understanding of the workings of the economy, and the opportunities and challenges facing an employer or organisation. Peer-to-peer learning opportunities allow sharing of experiences, discussing practical ways of solving problems and accessing information about training and support services.

Media activities on entrepreneurship can raise awareness and readjust expectations about life as an entrepreneur. They can help to understand the reality of being an entrepreneur (including failures and successes), teach them about risk assessment, and improve their understanding of products and market demand.

Online business guidance and support tools can offer many benefits. If created and managed appropriately, they have the potential to reach out to wider/different audiences than more conventional means of support as they can be made available to users, regardless of where they are based. They provide an 'instant' source of information/advice (e.g. for information which is already online). They can be more resource-efficient than face-to-face support or traditional methods such as the distribution of hard copy publications and help people to establish a network of contacts or get advice/share experiences with their peers.

The study countries differ greatly in terms of information and advice offered by public authorities (PES and business support networks), employer representatives (associations of entrepreneurs and chambers of commerce) and online enterprise services. They can contribute indirectly to the development of career management skills of new entrepreneurs by acting as brokers between general and specialist support services.

The example from Portugal reinforced the finding that private companies independently provide support to entrepreneurs. This support is tailored to the individual needs of the entrepreneur and, while not formally guided, often takes place regularly due to the commitment of the company and entrepreneur to make the venture succeed.

Support and guidance for migrant entrepreneurs is being encouraged in Member States in reaction to both political trends (led by the EU) and social developments such as economic decline and immigration increases. Research has also shown that such support and guidance can pay off: the EQUAL experience shows that business start-ups have been steadily increasing in regions where holistic interventions to support entrepreneurs from disadvantaged backgrounds have been implemented (EQUAL, 2004).

While migrants do not differ too much from native populations in terms of the issues they face, as a non-native group which might be hard for support services to reach, they need services which are tailor-made and targeted.

Migrants need coaching and mentoring from professionals who have up-to-date institutional and administrative knowledge of the host society, rather than informal networks of personal contacts who might not have accurate information. They need training within their community by trainers who understand the specific cultural needs of that community: this can be achieved by specific outreach programmes and 'training of trainers'. Community based 'business incubators' help migrants who are already entrepreneurs to expand their business and bring it into the mainstream successfully. Positive role models of

migrant entrepreneurs in the media can overcome some of the psychological barriers holding back migrants from pursuing their enterprises.

5.7.3. Challenges in delivery of career management skills

The challenge facing the expansion of mentoring opportunities concerns the difficulties in finding both funding and organisations to connect start-ups with available and appropriately skilled mentors. In order to convince more authorities to invest in mentoring, more scientific and longitudinal 'value-for-money' assessments are needed to demonstrate their value. So far, most studies related to mentoring schemes focus on analysing the attitudes of mentors and mentees about the programmes; such attitude surveys illustrate very positive results. All parties involved in mentoring initiatives are convinced that they are good value for money. However, it takes time and thorough research to demonstrate the longer-term 'effects' in monetary terms.

The cost of guidance and advice offered by entrepreneurial mentors is another complex matter. Mentors can be paid or they can offer their services free of charge. Some stress that mentee commitment is better guaranteed when they pay a fee for this type of service (e.g. the approach sometimes used in the UK); the Nordic model tends to encourage mentoring based on voluntary support. It is believed that mentees who are paying for professional mentoring sometimes expect 'guaranteed answers' because that is what they are paying for. There is also danger that this confuses some mentees about responsibility; the ownership and responsibility of business problems and resolutions must always lie with the mentee (the entrepreneur). However, this can confuse some mentees who pay for a mentoring service.

Mentors need to be able to acknowledge that they may not be the right person to provide a specific piece of guidance. In these cases they need to be able to introduce the mentee to someone who can be more effective. However, this is not easy if the mentor is paid for their work: they are expected to be able to provide this help or they may not be seen to provide 'value-for-money'.

There are potential disadvantages to the provision of support and guidance through online measures. Online services based on mentoring and provision of one-to-one advice are rarely a substitute for face-to-face interaction, especially if the guidance needs of the individual are complex; such online tools cannot go into the same depth as is possible through face-to-face interventions. Some online services also require quite intensive management of the site, e.g. forums, matchmaking services for mentors/mentees. This means that the online provision does not necessarily equal inexpensive provision.

For these reasons, online business guidance and support tools should be seen as complementary to other mainstream provisions, though their role might continue to grow in years to come as young people are increasingly operating in the 'online' sphere; their work, studies and even their free time is centred around the internet and its services. As shown by the face-to-face mentoring case studies, there are many experienced entrepreneurs who are willing to volunteer their time, free of charge, to support their less experienced 'peers'. It is important that this voluntary resource is used, whether it is for online or face-to-face support purposes.

The media have a relatively strong influence on attitudes towards things that listeners do not know well from direct life (European Commission, 2007), but they media are more likely to reinforce existing attitudes than to change them. Their main contribution to entrepreneurship is perhaps encouraging people who are considering setting up a business that it is feasible.

Both European and Member State policies increasingly emphasise the importance of providing targeted and tailored entrepreneurship support and guidance to women. Courses teaching entrepreneurship skills to women and internet resources and databases of support services seem to be quite widely available in Europe. It seems, however, that the kind of face-to-face, customer-focused and relational support that women would prefer, such as centres that provide women-specific entrepreneurship advice and mentoring schemes, are scarcer. Many national agencies exist for women entrepreneurs but they do not necessarily have sufficient regional/local ('grass-root' level) presence to reach to women all over the country and from all walks of life. Mentoring schemes are seen by some as challenging and/or expensive to set up.

Some question the understanding of the policy-makers of the women's enterprise agenda and, in particular, whether the critical role of all-encompassing, women-friendly support is sufficiently understood and how it should sit alongside mainstream provision in inspiring and supporting women's enterprise.

CHAPTER 6

Conclusions

6.1. General context

There has been a considerable shift across Europe in relation to entrepreneurship in recent years and there is clear evidence that education and guidance have roles to play in supporting Europe's future entrepreneurs. Assisting individuals to think creatively and embrace innovation is essential to developing the future workforce. Not everyone needs to become an entrepreneur, yet all members of society need to be more entrepreneurial. Getting people to face challenges and uncertainty in the world of work with entrepreneurial spirit will provide the European economy with independent and creative doers who can 'think outside of the box', respond to challenges and adapt to change.

Most young people are interested in getting to know better who they actually are; they tend to be open to self-exploration. Guidance presents an opportunity to influence their attitudes towards entrepreneurship and to make young people aware of the prospects and feasibility of becoming an entrepreneur. Guidance has the potential to increase participation in entrepreneurial learning opportunities and other activities aimed at stimulating the interest, skills and confidence of young people to take forward a business idea. This should increase the number of people who launch and grow new companies.

Entrepreneurial guidance and learning must be seen as a lifelong process of developing individuals' confidence, skills, attitudes and behaviours. This study confirms the findings of previous research in that it is important to familiarise children and young people with entrepreneurial attitudes and skills as early as possible. Entrepreneurship should be integrated into the education system at primary and secondary levels as well as in higher and adult and continuing education. Guidance professionals and teachers operating in all learning contexts need to be confident in dealing with entrepreneurialism to provide appropriate information, advice and support.

6.2. Formal and non-formal guidance in IVET and HE

The research conducted to prepare this report has shown that a range of guidance-based approaches are being implemented in European countries to develop aspirations among young people towards starting a business as a career option. Guidance is also increasingly being embedded in the entrepreneurship learning processes. The high level of interactivity in entrepreneurship education and the focus on solving real-life challenges faced by companies and entrepreneurs allow students to explore entrepreneurialism as a career option. Learners have access to a range of different guidance and learning experiences: they can establish how their personality, skills and core attributes match entrepreneur profiles and participate in practical assignments, exposing them to the demands and rewards associated with entrepreneurship.

Guidance for an entrepreneurial career is seen to play an even greater role in today's society, where young people can no longer expect to find a job-for-life but instead spend shorter periods of employment at one company/organisation. They must undertake different career pathways and make occupational choices at varying points in their lifetime. While it can still be argued that a career as an entrepreneur continues to be less secure than a career as an employee, careers services are already preparing young people for a working life which is characterised by much greater uncertainty than before. Within this context, VET and HE institutions that help to equip young people to develop entrepreneurial attitudes (e.g. creativity, flexibility and responsibility) and skills (e.g. identification of opportunities, team work, networking, etc.), serve a broader purpose in that they help young people to learn to cope with the uncertainty of today's labour market. Schools, colleges and universities need to be entrepreneurial in their approach to preparing individuals for the future; this is an idea also promoted by the Oslo Agenda for Entrepreneurship Education.

To date HE institutions and their formal career guidance services are much more active than IVET establishments in supporting entrepreneurship learning, even though fewer than half of HE students are exposed to entrepreneurship learning opportunities. Guidance often focuses on general employment opportunities rather than self-employment per se. Guidance for entrepreneurship education is also more common in Western European countries than East and South East Europe. While the situation has improved, the financial crisis means that more people are turning to entrepreneurship out of necessity rather than choice.

Recent EU policies on VET and HE have emphasised the importance of career guidance but there appears to be a gap between formal careers guidance

and the entrepreneurship agenda, possibly accounting for the lack of formal careers guidance for entrepreneurship and the array of non-formal guidance in place. Guidance provided through non-formal channels is also more widespread across Europe than formal guidance in relation to entrepreneurship and entrepreneurship learning. Non-formal guidance also still lacks consistency in terms of its quality and number of activities on offer across Member States.

6.3. Engaging young people in entrepreneurial activities

The study identifies a number of lessons regarding the role of guidance in engaging young people in entrepreneurship learning and related activities. Awareness-raising and information provision (i.e. printed and digital information and guidance on becoming an entrepreneur) is still the most common method of engagement for VET and HE institutions across Europe. However, while such methods are common and have an important part to play in information-dissemination, they may not necessarily be the most effective method of engaging students in entrepreneurial learning. Non-formal guidance methods, utilising the power of recommendation in the form of student ambassadors and student led clubs and networks, prove very successful at informing, and thereby engaging, students in entrepreneurship learning. In some universities, up to 80% of learners have been engaged through this method. It is particularly useful to tap into the enthusiasm and motivation of former students who have just participated in entrepreneurship learning and guidance.

Awareness-raising through taster sessions about entrepreneurship provide an alternative method of informing young people about entrepreneurial concepts and approaches. Guidance services have an important role to play in progressing interested young people from such familiarisation activities towards entrepreneurship education that will allow them to deepen their knowledge and to develop the entrepreneurial ability to identify and capitalise on business opportunities, to launch a business and manage its growth.

Events and festivals can be an effective way of reaching large groups of students at one time, but focus on events and other project-based approaches tends to rely on short-term funding which makes such approaches fragile. Consequently, they need to be combined with approaches that have a more long-term view and higher impact on entrepreneurial skills and competences.

Although some of the newer media methods are criticised by some, case studies indicate that social networking sites are another successful way of

reaching out to the wider student population, and several universities are looking further into this form of recruitment. Some online-based guidance platforms have been created for students and aspiring entrepreneurs to assist networking, and to provide support. However, the case studies demonstrate that there is immense value in real person-to-person interaction; while online services within VET/HE can support entrepreneurial activities, they cannot replace one-to-one support. Role models and mentors underpin most successful guidance-oriented entrepreneurship programmes; students want to see, and get to know, those who have success stories to tell. The involvement of entrepreneurs themselves is also critical.

There has also been an increase in entrepreneurial publicity campaigns and TV/radio programmes attracting mass audiences. Such items present ordinary people pursuing entrepreneurial goals. Despite there being numerous criticisms due to a lack of assessment of their methods or educational value, these activities have a significant symbolic value in fostering people's aspirations, raising awareness about entrepreneurship, showing 'ordinary' people that everyone has the potential of being an entrepreneur and also presenting lessons about entrepreneurship.

Extracurricular activities can serve a dual purpose and are useful where entrepreneurship is not embedded in curricula as follows:

- raising awareness about entrepreneurship as a career choice and about entrepreneurship learning opportunities;
- strengthening students' transversal skills for entrepreneurship, e.g. innovation, creativity, problem-solving and adaptability, and entrepreneurial competences, e.g. business planning, market awareness, understanding of regulation and legislation.

However, the focus should shift from extra-curricular 'add-ons' to a model of education in which entrepreneurship is embedded in the curriculum.

Different engagement methods are needed. For example, evidence from the HE sector suggests that students with business and economics backgrounds are more easily attracted to entrepreneurship learning than students with technical, social or science backgrounds. This said, the recruitment of technology and science students is particularly important if the HE education sector is to pay particular attention to the high-growth business agenda and the commercialisation of research.

6.4. Key lessons

Business involvement in entrepreneurial initiatives at all levels has been generally patchy and unstructured. However, evidence implies that there is growing interest from companies, entrepreneurs and business professionals to engage in entrepreneurial ventures, moving towards the strengthening of links between education, business, research and innovation desired by the Europe 2020 Strategy. Some business professionals are motivated by potential opportunities to advertise their business (for possible later recruitment purposes) and others simply want to support entrepreneurialism among students. Some are motivated by the opportunity to seek student views on their business challenges. The case studies show that companies have been impressed by the results, and have gained much from participating. Resources, however, need to be dedicated to identifying and then engaging business, especially business owners, to ensure that their involvement benefits the entrepreneurship agenda.

A key lesson generated through the dialogue between entrepreneurs and aspiring entrepreneurs is that there are no linear pathways or privileged routes that must be taken to achieve one's career goals, but that pathways can be diverse and sometimes unexpected.

Many organisations outside mainstream public education have played a key role over the years in introducing and supporting the entrepreneurship agenda of VET and HE institutes. Examples include associations representing entrepreneurs and/or SMEs, or chambers of commerce; the financial investment made by such organisations is impressive (e.g. the *Nuits de l'Orientation* initiative funded by the French chambers of commerce and industry). The level of investment afforded can be a proxy for the importance attributed by such organisations to activity in this field. However, such commitment is not evident uniformly across Europe. International organisations such as Ja-Ye and EuroPEN have also made significant investments. These organisations are the main source of entrepreneurial activity in many countries in different ways.

6.5. Future challenges

It would be a significant task to create universal access to entrepreneurship education and guidance. Ensuring that teachers involved in entrepreneurship education are trained/retrained and supported to apply the experiential, hands-on approach required to deliver entrepreneurship education, and have access to guidance materials to support their work, is a major task. The study confirmed

that while most countries offer teachers some level of training on entrepreneurship, this is generally provided by external organisations and delivered on an ad-hoc basis and less likely to be part of a coherent, systematic approach to entrepreneurship training delivery. Guidance professionals will also need to be equipped with information and skills about the career opportunities offered by entrepreneurship. It is necessary to introduce cross-disciplinary approaches to entrepreneurship education, to integrate entrepreneurial support activities for guidance professionals and teachers/lecturers, and to embed interactive teaching. These changes will all require new models of working and new policy frameworks.

The role of guidance is also limited by the fact that guidance professionals currently have limited contacts with the business world. Also real entrepreneurs are not adequately included in the promotion of entrepreneurship as a career option in all IVET and HE institutions, though significant development has taken place. Despite a growing focus on entrepreneurship and a range of awareness-raising activities having been implemented, many students are still not always aware of entrepreneurship as a career option. Evidence indicates that many students still prefer more traditional employment positions rather than self-employment. Attitudes need to change, which requires investment in promoting entrepreneurship (and teaching children entrepreneurship for younger children as well), especially in mentoring and role model approaches.

Significant anecdotal evidence is available to support the positive effects of guidance-related interventions discussed in this report, but empirical and longitudinal studies are less commonly available. This report has provided examples of evaluation results which are mainly linked to mini-companies, mentoring initiatives and the activities of some individual universities.

The challenge lies in demonstrating the impact of specific entrepreneurial learning activities as well as the impact of formal guidance related to entrepreneurship. Impact assessment and evaluation work is hampered by a lack of commonly accepted indicators for success. Most often, entrepreneurship-related support programmes are evaluated on the basis of academic knowledge about entrepreneurship, academic performance more generally, business formation and wealth generation, and personal values and aspirations (Volkman et al., 2009). If the guidance value is to be included, such evaluations should investigate entrepreneurship as a broader concept, including awareness of entrepreneurship as a career option and career aspirations of young and adult learners. They should also explore broader entrepreneurial attitudes, skills and competences.

CHAPTER 7

Recommendations

7.1. Policy

In looking forward, a key starting point is the development of a policy agenda and associated policy framework for guidance related to entrepreneurship learning, covering education and training, employment and enterprise development, which promotes:

- entrepreneurship as a career option for all, to aid diversification in the population of entrepreneurs;
- entrepreneurship as a mandatory element of the career guidance offer at all levels, for all pupils and students, in all types of education and training;
- progressive and coordinated curricula for entrepreneurship education, where basic skills are developed in primary and lower secondary education and are further developed through upper secondary, IVET and HE which is then taken forward by individuals as they enter working life;
- training for career guidance professionals (and other education and training professionals) to ensure they are equipped to support individuals to acquire entrepreneurial skills/competences.

As emphasised in the 2008 Council Resolution on better integrating lifelong guidance into lifelong learning strategies, entrepreneurship guidance and learning cannot operate in a vacuum: it has to be intrinsically linked to the employment and enterprise development policy agendas.

7.2. Practice

As part of this policy framework, schools, VET and HE institutions need to be encouraged to provide learning environments that develop students' entrepreneurial skills and competences and embrace entrepreneurial principles across curricula: developing initiative, confidence, self-efficacy, creativity, responsibility and determination. Measures taken to support the development of entrepreneurship skills and their application in the world of work need to be complemented by appropriate start-up support.

Appropriate media need to be used to promote entrepreneurship to students and workers interested in establishing their own businesses.

Guidance practitioners and education and training professionals need to ensure that individuals interested in entrepreneurship have access to credible role models and possible mentors, hence links are to be established with appropriate business people: former students, local entrepreneurs, etc. Such role models play an important role in explaining the path they took to entrepreneurship, what it entailed and how their studies linked to self-employment, enabling aspiring entrepreneurs to understand the challenges they might face. Schools, authorities and project promoters should seek to tap into the willingness of many experienced and/or retired entrepreneurs to volunteer their time to act as a role model or mentor.

The types of extra-curricular activities described in this report should continue to play a key part in helping to develop entrepreneurship. Cross-disciplinary initiatives enable students to draw on expertise of colleagues with different outlooks and skill sets and thereby help to build entrepreneurial characteristics such as teamwork and creativity.

A 'meeting of minds' that brings together academic theory on entrepreneurship and practical experience is necessary so theory and practice becomes intertwined. Practical experience is crucial and allowing students time in businesses learning from entrepreneurs, as well as bringing entrepreneurs into education and training institutions, provides the necessary exposure to understand day-to-day business practices. Many underachieving students excel in practical, entrepreneurship-oriented activities. Work placements and internships in SMEs, start-up companies in particular, can also be useful for stimulating interest in business formation.

In pursuing an entrepreneurial policy agenda, it is paramount that careers guidance and education and training professionals are equipped with the necessary skills and knowledge to support students. Such skills and knowledge need to underpin their day-to-day activities, and so should be built into initial and continuing training. Guidance services, including those aimed at supporting aspiring and new entrepreneurs, should be accessible to everyone. They also should take into consideration the specific barriers to entrepreneurship faced by individuals from disadvantaged backgrounds and groups which are currently under-represented in the entrepreneur community.

This study also reinforces the recommendations of the 2008 Council Resolution on lifelong guidance in that it emphasises the importance of equipping individuals with skills to manage their careers throughout their lives. Career management skills can help prospective and new entrepreneurs to survive and

succeed in a challenging business world. Mentoring between new and experienced entrepreneurs is one of the most effective ways of equipping novice entrepreneurs with skills and competences to manage not only their new business but also their career. Networking and peer learning and support opportunities should also be made available for new entrepreneurs.

7.3. Research

This study suggests that more attention will have to be given in the coming years to broadening and deepening the evidence base in the area of entrepreneurship/entrepreneurship education in Europe and in the individual Member States. It also reiterates one of the key recommendations of the 2008 Council Resolution on lifelong guidance; it has demonstrated the need for closer and stronger linkages between policy, practice and research related to guidance. To support this policy agenda, there is a need for a strong evidence base: such evidence is necessary to effect change and demonstrate how and why different approaches work, for whom and in which education, training or employment contexts. This study goes some way towards cataloguing the current evidence base, though it demonstrates that additional research is required to understand fully the impact of entrepreneurial learning activities and supersede anecdotal evidence. In summary, the communities of policy, research and practice seem to be facing questions of considerable significance that require systematic analyses in order to move forward policies and strategies linked to entrepreneurship/entrepreneurship education. The extent to which policy makers, academics and practitioners are currently equipped to understand their role in promoting entrepreneurship/entrepreneurship learning is an important issue to be explored further.

List of abbreviations

ACES	Andalucían Association of Social Economy Education Centres
ACFCI	Assemblée des Chambres Françaises de Commerce et d'Industrie
APS	Adult Population Survey
ASE	Bucharest Academy of Economic Studies
BYKO	A construction products store in Iceland
CCIs	chambers of commerce and industry
CEBs	city enterprise boards
Cedefop	European Centre for the Development of Vocational Training
CEED	Center for Entrepreneurship and Executive Development
CEPES	European Centre for Higher Education
CMS	Career management skills
CPD	Continuing professional development
DEL	Danish Institute for Educational Training of Vocational Teachers
ELGPN	European Lifelong Guidance Policy Network
EC	European Commission
ESF	European Social Fund
EU	European Union
GEM	Global Entrepreneurship Monitor
HE	Higher education
HEIs	Higher education institutions
i2b	ideas2business
ICT	information-communications technology
ISCED	International standard classification of education
IVET	initial vocational education and training
JADE	European Confederation of Junior Enterprises
JA Worldwide	Junior Achievement Worldwide
JA-YE	Junior achievement young enterprise
LdV	Leonardo da Vinci
LFS	Labour force survey
MBA	Master of Business Administration
NMS	new Member States
NSZI	National Institute of Vocational and Adult Education

NU	Newcastle University
OECD	Organisation for Economic Cooperation and Development
P2P	peer-to-peer
PES	public employment services
PR	public relations
PTF	practical training firm
RCIC	regional consultancy information centres
RSTP	Riga Science and Technology Park
SME	small and medium enterprise
SSE	Stockholm School of Economics
SSE Riga	Stockholm School of Economics in Riga
TOP	temporary entrepreneurial positions
VET	vocational education and training
WEF	World Economic Forum
YSI	Young Social Innovators Programme

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Guidance supporting Europe's aspiring entrepreneurs

Policy and practice to harness future potential

As globalisation continues to confront European societies with new challenges, each citizen will need a wide range of skills and competences to adapt flexibly to a rapidly changing, complex and highly interconnected world. In this setting, entrepreneurship is often seen as a positive force in supporting growth, recovery, and societal progress by fuelling innovation, employment and social empowerment. This Cedefop report reveals that, across Europe, education and training programmes in entrepreneurship have a helpful impact on developing individuals' entrepreneurial qualities, raising awareness of self-employment as a career option and creating a positive attitude towards entrepreneurial activity. Entrepreneurship should not only be considered as a means of setting up a new business, but as a general mindset that can be easily put in practice by everyone in daily life and in different working environments.

The report shows that the education and training provision in VET and HE is increasingly strengthening such entrepreneurial attitudes in young people. Current policies convey a strong message of support for entrepreneurship and are setting the strategic framework in which education and training providers can better implement related programmes and activities.

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