



TESEUS Overall Report

On success & failure factors and drivers & inhibitors in start-up promotion and firm creation support for entrepreneurship of IVET students

Outline

Executive summary and main findings

- Executive summary of TESEUS country snapshots

- Executive summary of policy, third sector and industry review at EU level

- Executive summary of academic literature review

Success and failure factors and recommendations

- List of success and failure factors

- List of recommendations

Annexes

EXECUTIVE SUMMARY AND MAIN FINDINGS

This is an executive summary of findings that yielded from comprehensive mapping of start-up promotion and firm creation support practices aimed at IVET students. The mapping was undertaken by TESEUS partners in their respective countries. It served as a basis to identify success and failure factors and drivers and inhibitors in how to create firms and establish start-ups in IVET context, and to develop related recommendation.

The aim of this output is to provide an overall picture, rather than an in-depth analysis, of start-up promotion and firm creation support practices aimed at IVET students. The investigation was based on interviews and desk research executed by project partners in their respective countries. This report is an expert subjective interpretation of the current status based on the available information and obtained findings.

Executive summary of TESEUS country snapshots

Entrepreneurship within IVET systems and strategies

- In all TESEUS countries, entrepreneurship is recognized as an important driver of economic growth and job creation, and thus it is often listed among the hot topics on policy makers' agenda. However, the way in which this importance is translated into the IVET context varies across countries.
- In some of the analysed TESEUS countries, top-level policy bodies create educational strategies (either as specific entrepreneurship-related strategy or by embedding entrepreneurship into broader general strategies), action plans, measures and instruments (i.e. concepts, frameworks, curricula, syllabi, toolkits etc.) to equip IVET providers with means for education towards entrepreneurship. In others, entrepreneurship is included but not prioritized or explicitly supported within education programming, and the emphasis is given on other dimensions of practical IVET (e.g. dual VET systems, work-based learning, apprenticeships, etc.), with merely an employer-producing rather than an entrepreneur-producing character of IVET systems.
- Some TESEUS countries, however, report inconsistency or lack of common understanding on the meaning of entrepreneurship education and support. This could lead to problems related to education programming, curricula development and implementation, or teacher training.
- In most of the TESEUS countries, the educational aspect of IVET systems is centrally organized and defined by national legislation and respective ministries with their dedicated bodies, while some competences are decentralized and delegated to regional/local authorities, IVET schools and other education providers themselves.
- In addition, decentralized curricular models are usually applied, consisting of common educational standards while enabling schools and other IVET providers to adjust their curricula according to regional and industry needs and specifics.
- Such decentralization provides certain freedom and room for adjustment to regional specifics and needs. On the other hand, it also often results to different quality of (not only) entrepreneurship education and support. Even in countries where centralized measures and instruments are available, their application across regions and schools is very individual and differences in quality might occur.

Start-up promotion and firm creation support in IVET context

- With respect to entrepreneurship, IVET education policy makers and programmers emphasize mostly the educational aspects. There are, however, various levels of integration of entrepreneurship education into IVET curricula. It goes from embedding entrepreneurship-related issues into more comprehensive set of learning outcomes or modules, to developing common specialized curricular units, and even beyond by maintaining platforms for practice exchange between educators or building specialized infrastructure (e.g. classrooms).
- Unfortunately, the mode of education is often rather theoretical than practical (in case of traditional educational methods in classroom environments). On the other hand, practice-based approaches such as simulations or experiments as are often used in initiatives like enterprises, training firms or student mini-firms.
- In some TESEUS countries or in some regions, such initiatives aimed at providing practical aspects of entrepreneurship education together with help, support and recognition to those interested in entrepreneurship, are provided by public bodies. In most cases, however, they are not part of the official curriculum and participants (schools or individual students) can adopt them or participate in voluntarily.
- Also, private or third sector initiatives often play an important role in filling gaps when common curriculum is not available and/or where it lacks practical elements or connection with business practice. However, participation in these is also voluntary for schools and often depends on individual initiative. These initiatives can be both integrated into the curriculum or also work as extracurricular activities.
- Start-up promotion and firm creation support in IVET context is often limited to providing students with information about self-employment as one of the options to access the labour market within career guidance services.
- There are no institutionalized support mechanisms and initiatives aimed at firm creation, and usually no information channels on support programmes or start-up procedures specifically targeted and tailored to IVET students. Moreover, business incubators are not present at IVET schools.
- In some individual cases, projects, activities, events and initiatives by individual schools or even teachers related to start-up and firm creation support in the IVET environment might occur. However, these are often small-scale or temporary.
- IVET students often have unequal access to entrepreneurship education and support due to regional disparities, also because schools are often participating in projects or initiatives on voluntary basis. Therefore, the form of entrepreneurship education and support very much depends on particular schools or even on individual teachers. In addition, some TESEUS countries indicate unequal access to opportunities for some VET disciplines.
- However, IVET students and fresh graduates (like anyone else) have access to generic measures (entrepreneurship support programmes, instruments, and initiatives), channels and incubators in their countries or regions, providing they fulfil the eligibility criteria.

More details on each of the TESEUS partners' national context can be found in TESEUS Country Snapshots. In addition, TESEUS partners have researched examples of initiatives related to start-up promotion and firm creation support for entrepreneurship of IVET students in their national environments. As a result, a set of TESEUS Case Studies that highlight and briefly analyse these examples had been produced. These case studies are presented as annexes to this report.

Executive summary of policy, third sector and industry review at EU level

Since 2008, Europe has been suffering the effects of the most severe economic crisis it has seen in 50 years and in the majority of Member States small and medium-sized enterprises (SMEs) have not yet been able to bounce back to their pre-crisis levels. Unemployment rates reached the top levels ever and the EU policies are oriented to job creation and growth since many years. Challenges to smart, sustainable and inclusive growth are structural and the European Commission released the Europe 2020 Strategy in 2010 to respond and laid the foundations to growth and competitiveness. The European Commission firmly believes that entrepreneurship is a driver of economic growth and job creation, and that to ensure higher levels of employment Europe needs more entrepreneurs.

To do so, the VET and IVET systems are crucial and their effectiveness can help shifting people mindset towards entrepreneurship and self-employment. Even though the European Commission is working for the modernisation of Initial Vocational Education and Training, much remains to do to improve the quality and responsiveness to labour market needs of the entire system. While firm creation and start-up promotion is a developed mechanism in higher education, no such systems exist in IVET that includes only (in most cases) theoretical entrepreneurial education (generic courses on entrepreneurship). Yet, in Europe, there are no real business incubation and firm creation mechanisms in IVET: at best, there are business plan competitions, simulations or student training companies, but no real firm creation.

Increasing participation in Initial Vocational Education and Training (IVET) is one way to improve competitiveness hence it is in the focus of several European policies. Modernisation of IVET is one of the main topics of current discussions both at EU and member state levels: in order to increase the attractiveness and prestige of IVET, member states have to improve their quality and responsiveness to labour market needs.

Previous research on entrepreneurship education has shown significant variations in practice both between European countries and within them, which has resulted from a different understanding and interpretation of entrepreneurship education, given by the European Commission Thematic Working Group on Entrepreneurship Education. The coverage in the curriculum of the different types of learning outcomes related to entrepreneurship education is uneven across Europe. Overall, only around 15 Countries/Regions include a wide range of entrepreneurial learning outcomes in relation to compulsory subjects and/or cross-curricular areas at least for one education level.

While EU-level policy will not interfere in the content and structure of VET, its role in relation to transparency, transferability and portability of skills and qualifications will increase. It is still an important area for Europe: the most frequent strategy actions can be seen in the areas of practical entrepreneurial experiences, teacher education and teaching methods. All Countries with a specific entrepreneurship strategy included an action related to practical entrepreneurial experiences through different means or curriculum-based practical entrepreneurial challenges. It is a high priority at EU level for all Member States to include at least one practical entrepreneurial experience during compulsory education.

A recent survey, however, highlighted that European citizens are less interested in themes pertaining to entrepreneurship, start-ups, and business failures and are less prone to start a business or to take risks. Also, just under a quarter of EU respondents said that they had taken part in a course

or educational activity about entrepreneurship. On the other hand, half of EU respondents (50%) agree that their school education helped them to develop a sense of initiative and a sort of entrepreneurial attitude. At the same time, country variations are substantial on this question

School education and VET play a key role in building an entrepreneurial mind-set and accompanying citizens to self-employment. Thus, more efforts by EU stakeholders and policy makers in providing educational and training tools and support for start-up promotion and firm creation across EU are needed. Even though European institutions do not have a direct competence on VET and IVET systems, their strategies are applied within member states. Also The European Commission promote and support entrepreneurship education through the following:

- Funding to European projects that will create reference models for further exploitation, through calls for proposals
- Promoting exchanges of good practice and experiences at the EU level
- Organising of workshops for policy makers and practitioners
- Helping policy makers and other stakeholders network
- Publishing guidelines based on existing good practice in Europe
- Releasing studies, indicators, and data collection

In addition, financial support by the European Commission is provided through the Erasmus+ Programme and the European Social Fund. Non-financial support and information are provided mainly through the Your Europe Business Portal, the Enterprise Europe Network, the SME internationalisation support page or the single portal on Access to Finance.

Executive summary of academic literature review

There is a rather an extensive amount of academic publications focusing on youth entrepreneurship in general. However, considerably smaller amount of research focuses on student entrepreneurs. Moreover, only a small fraction of these focuses on IVET students or other groups of secondary school students, or youth in adolescence and early legal adulthood. The dominant research streams include research on formative factors, drivers and developmental pathways to entrepreneurship; research on impact of entrepreneurship education and training on entrepreneurial outcomes; and research on specific characteristics, barriers and obstacles of youth in relation to entrepreneurship, and their solutions and potential triggers of entrepreneurial action. In brief, the reviewed literature suggests that entrepreneurial personality and authoritative parenting are related to entrepreneurial competencies, while early age-appropriate entrepreneurial competencies and interests, social skills, mild rule-breaking behaviour and having an entrepreneurial peer group at school seem to be precursors of youth entrepreneurship. In addition, research found some differences between drivers among girls and boys. Finally, literature also suggests that most of young entrepreneurs learn about business creation either at home through their parents, from their friends and peers, or through early own “just do it yourself” experiences, but not through traditional education. As for the impact of entrepreneurship education, literature suggests that while experiential learning is important for developing efficacy and hands-on competencies (such as scanning and searching, or evaluation and judging), verbal persuasion still plays an important role in shaping the entrepreneurial mindset of students. Thus, a “healthy mix” of both is needed to make an entrepreneurship education successful. Finally, as for the specifics of youth in relation to entrepreneurship, they seem to be different in accumulation of resources and skills, psychological, cognitive and motivational attributes, and reaction to influences from the environment, culture and norms. The barriers and obstacles of youth entrepreneurship in general are related to human, financial and social capital, lack of awareness and acceptance, administrative obstacles or loss of social benefits.

Entrepreneurship education and support frameworks emphasize need to account for specifics of different target groups, as “one-size-fits-all” approach seems not to be efficient. Diversification is mostly based on progression models that use different criteria (e.g. levels of knowledge and entrepreneurial intention of trainees, stages of progression in the entrepreneurship process or pipeline, or stages of education). Also, the reviewed literature points out that despite considerable efforts, there are still gaps in entrepreneurship education and support (not only) in IVET context. On the other hand, research findings suggest that intensive deployment of entrepreneurship education on secondary level, both in terms of quantity (high penetration, high individual involvement, long duration) and quality (practical, experiential learning), has a positive impact on students skills, knowledge, self-employment preference and general school performance, but also a substantial positive impact on school’s organization and teachers’ attitudes. Moreover, such approach is generally appreciated and supported by private sector partners and students’ parents. At the same time, another research suggested that despite generally endorsing the idea of starting a business, only a few IVET trainees planned to start a business straight after graduation. Instead, they first wanted to gain some work experience as employees. On the other hand, those IVET learners who exhibit entrepreneurial intention need immediate support (as early as they just begin screening for opportunities), otherwise the chance it will be actually translated into action gradually decreases.

As for the teaching methods, the most commonly used methods within entrepreneurship education in VET system are lectures, computer simulations and business games, student companies, project work and group work, company visits and work placements. The practical methods include mainly

setting-up and managing practice firms and student companies (either virtual or real-life). They seem to be sufficiently widespread not only in commercial but also in technical VET schools. However, there is still a gap between the most effective and the mostly used teaching methods, and lack of interdisciplinary way of working on concrete projects. The most effective way to achieve EE objectives is to engage students in practical projects and activities (working preferably in small groups), where students gain experience with entrepreneurship and learning-by-doing and learning-by-creating-value is emphasized.

Despite the fact that business incubation is frequently emphasized as an efficient tool to support early-stage entrepreneurial activities, it is not typically associated to IVET context and physical business incubators can be rarely found in IVET schools. If so, these are rather large and robust IVET institutions (with thousands of learners) than small regional IVET schools. Some aspects of business incubation might be provided by private or non-profit projects or initiatives that contain (usually temporary, project-related or virtual) business incubation and acceleration offers. Also, IVET students might benefit from availability of generic business incubation offers in their regions, providing they fulfil general eligibility criteria.

Based on the reviewed literature, we have identified several key implications for entrepreneurship education and support in the IVET context (or general but applicable to the IVET context). Despite varying character of the reviewed documents (from research studies with different research designs, scopes and perspectives, through expert panels to application projects' documents and reports), we only found complementarity but almost no contradictions between their implications and recommendations. Thus, we might conclude that there is generally a good consensus on what should be done and what should be avoided in providing entrepreneurship education and start-up support to (not only) IVET students and/or fresh graduates. The aggregated implications are presented in the full document (Annex 4).

Note: This executive summary was elaborated from the original full document (Annex 4). For practical reasons, it does not contain references. However, all references on the resources reviewed and used in the text are provided in the original document.

SUCCESS AND FAILURE FACTORS AND RECOMMENDATIONS

In the next sections, we provide an overview of success and failure factors that have been extracted by TESEUS partners in comprehensive mapping of start-up promotion and firm creation support for entrepreneurship of IVET students. Further, they are followed by recommendations for establishing firm creation and start-up promotion systems in IVET environment.

List of success and failure factors

TESEUS partners have identified the following **success factors** important for successful implementation of entrepreneurship education and startup and firm creation support in the IVET context:

Context (broader socio-economic context, cross-sectional areas)

- Existence and availability of entrepreneurship support programs, incubators and accelerators at national/regional level - generic but accessible to IVET students
- Existence and availability of entrepreneurship support funding schemes - generic but accessible to IVET students
- Events, initiatives, projects and competitions in regional/national ecosystem organized by both public and private actors
- Positive and active attitude of young people towards entrepreneurship, raised awareness of the benefits of becoming entrepreneur, interest in becoming an entrepreneur
- Raised awareness of the benefits of IVET learning, improved attractiveness of the IVET system
- Support from the Europe 2020 strategy that mostly revolves around entrepreneurship and jobs creation to sustain growth and promote inclusion

Policy/strategic level

- Recognition and importance of entrepreneurship on all levels of educational system
- Entrepreneurship strategies, integrated initiatives and “toolboxes” created and implemented in the educational system
- Development of entrepreneurship competences embedded in the educational system
- Dual VET systems, mandatory school-work alternating training
- Scaling for impact - involvement of high number of institutions/students, availability of sufficient financial resources
- Prevalence of school-based IVET makes entire system accessible

Operational level

- Initiatives and courses are tailor-made to the needs and interests of IVET students
- Practical dimensions of teaching and connection with business sector and civil society
- Developing new entrepreneurial skills and competencies among students in order to link the educational field with the entrepreneurial field
- Courses that are associated with enterprises and start-ups deontology and management

TESEUS partners have identified the following **failure factors and inhibitors** that might act as barriers in implementation of entrepreneurship education and startup and firm creation support in the IVET context:

Context (broader socio-economic context, cross-sectional areas)

- Lack of interest in entrepreneurship as a desired career choice (e.g. due to risk aversion, preference of stability etc.)
- Lack of interest for IVET education among young people
- Missing legislation framework for setting-up a business alongside IVET schools

Policy/strategic level

- Lack of governmental policies around entrepreneurship and IVET system
- Instability and uncertainty in policies
- Uncertainty around the meaning of entrepreneurship education
- Lack of specific initiatives and centralized guidelines to promote and diffuse entrepreneurship education
- Educational system not fostering enterprising attributes, such as creativity etc.
- Administrative delays and bureaucracy in grant schemes
- Traditional academic evaluation system
- Insufficient coverage of some fields of study in entrepreneurship education

Operational level

- Gaps in implementing strategies on local or school level and their translation into operational changes
- Differences in quality due to decentralization and regional disparities
- No incentives and encouragement for IVET students to create startups from schools
- No real business incubation and firm creation mechanisms in IVET
- Theoretical character of some business education, traditional teaching methods that do not stimulate entrepreneurial skills
- Difficulties in involving professional entrepreneurs in training and educational courses
- Adoption of programmes or courses from abroad without adjusting them to local context
- Successful implementation is highly dependent on individual teachers and their effort
- Complexity in training teachers on the subject

List of recommendations

Based on the comprehensive mapping and analysis, TESEUS partners have formulated several **recommendations** for entrepreneurship education and startup and firm creation support in the IVET context. We have decided not to target the broader socio-economic context and cross-sectional areas, as the IVET context has only a very limited possibility to influence these.

Policy/strategic level

- Developing a national/regional level strategy, action plan and toolkit at policy-levels
- Developing common sample courses to be implemented as compulsory courses at IVET schools, with reasonable standardization and reflection of regional/local specifics
- Covering all VET disciplines, not only those traditionally linked with business
- Inclusive approach ensuring that all groups and disciplines are addressed sufficiently
- Promoting the interdisciplinary nature of entrepreneurship
- Developing of more funding opportunities for start-ups creation specially for IVET students
- Implement an integrated campaign around entrepreneurship and IVET education

Operational level

- Promoting the inclusion of entrepreneurial skills, managerial skills, creativity and the ability to think outside the box as basic skills to be taught during school years
- Emphasizing the practical dimension of IVET (e.g. internships, WBL), using experiential learning, ensuring good balance between theory and practice
- Building on the state-of-the-art and tailored theoretical content for micro and small enterprises
- Connecting with enterprises, experienced and young entrepreneurs, local community in different ways – e.g. mentoring programs with local entrepreneurs, accountants and sales people, promoting role models and success stories, encouraging participation of students in gatherings of entrepreneurs and start-ups
- Improving training on business planning and project skills, soft-skills
- Introducing special awards to entrepreneurial projects of students
- Setting-up small scale prototyping centres in IVET schools
- Using assessment tools for students' entrepreneurial inclination and interest
- Providing quality entrepreneurship training for teachers and ensuring their appropriate qualification in entrepreneurship (through experience in business and/or participation in training)
- Ensuring that programmes or activities have well-defined objectives and appropriate measures, making regular evaluations and ensuring feedback loops from students
- Actively involving students in the learning process and emphasizing their responsibility for their own education

ANNEXES

The following annexes are important integral parts of the TESEUS Overall Report on success and failure factors, and drivers and inhibitors in start-up promotion and firm creation support for entrepreneurship of IVET students.

List of annexes

1. Country snapshots
 - 1.1. TESEUS Country snapshot Spain
 - 1.2. TESEUS Country snapshot Greece
 - 1.3. TESEUS Country snapshot Italy
 - 1.4. TESEUS Country snapshot North Macedonia
 - 1.5. TESEUS Country snapshot Romania
 - 1.6. TESEUS Country snapshot Slovakia
2. Core TESEUS case studies
 - 2.1. TESEUS Case study SEAVUS (North Macedonia)
 - 2.2. TESEUS Case study JA Mini Enterprise (Romania)
 - 2.3. TESEUS Case study Practice enterprises (Slovakia)
 - 2.4. TESEUS Case study MIUR (Italy)
 - 2.5. TESEUS Case study Proyecto Lunar (Spain)
 - 2.6. TESEUS Case study JA virtual enterprise (Greece)
3. Policy, third sector and industry review at EU level
4. Academic and research literature review at EU and international level
5. Supplementary TESEUS case studies
 - 5.1. TESEUS Case study Apes (Spain)
 - 5.2. TESEUS Case study Prince's Trust Enterprise Programme in Greece (Greece)
 - 5.3. TESEUS Case study Roma Capitale (Italy)
 - 5.4. TESEUS Case study CEFÉ Macedonia (North Macedonia)
 - 5.5. TESEUS Case study Idee-exe.ro (Romania)
 - 5.6. TESEUS Case Study JA Firma (Slovakia)
 - 5.7. TESEUS Case study JA-YE - Junior Achievement (Europe)
 - 5.8. TESEUS Case study National Action Plan 2010-2014 in Norway (Europe)