



Background paper for the workshop 'Entrepreneurship competence in VET'

Research methods and early findings

The 2020 [European Skills Agenda](#), [Council Recommendation on vocational education and training](#) (VET), and [Osnabrück Declaration on VET](#) emphasise the importance of entrepreneurship competence. In May 2021, Cedefop launched a study to support policy-makers, social partners, VET providers and other stakeholders with new evidence on how entrepreneurship competence is embedded in VET.

The study focuses on the entrepreneurial learning ecosystems, including policy, practice and gaps between the two domains through case studies in Austria, Croatia, Finland, France, Italy, Latvia, Spain and Sweden. It covers initial VET (school-based and work-based, including apprenticeships) and to some extent continuing VET, including methods, tools and approaches that support learning, teaching, and assessing entrepreneurship competence.

This paper briefly presents the methodology and early findings of the pilot research conducted in Italy and Latvia in autumn 2021. The research will continue in 2022.

Main research questions

- (a) To what extent, and how, do the dimensions of entrepreneurial learning ecosystems facilitate acquiring entrepreneurship competence in VET in Europe?
- (b) Which policies, methods, tools and approaches best support embedding entrepreneurship competence in VET?

Definitions

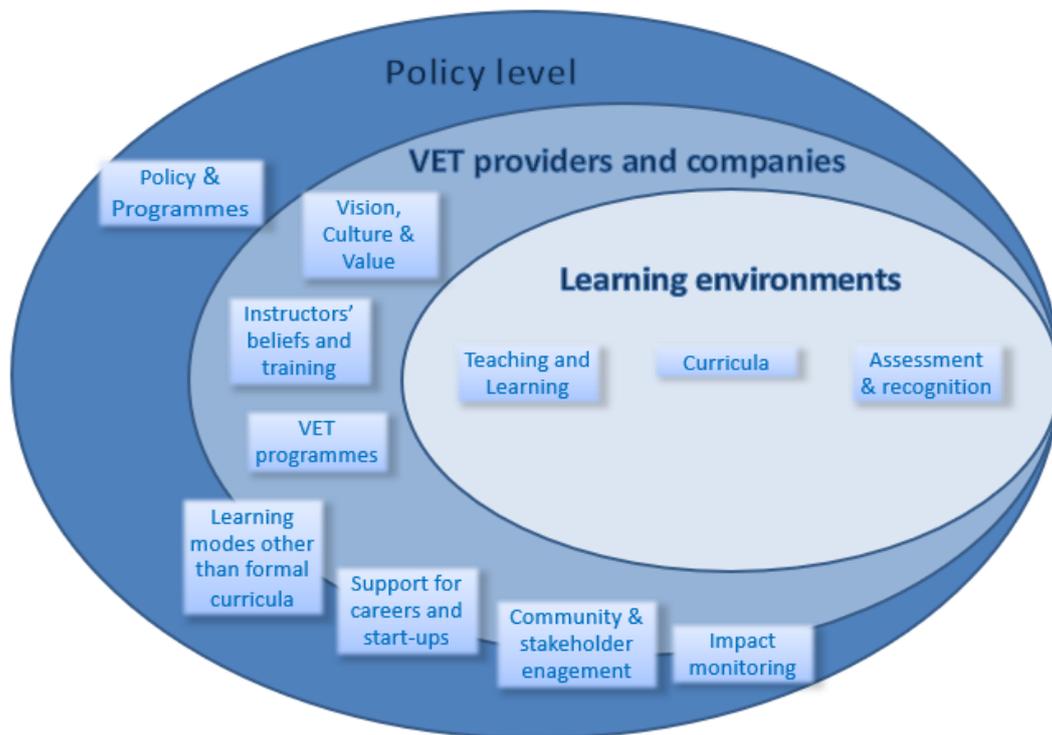
Entrepreneurship competence is defined as a key competence which applies to all spheres of life: from nurturing personal development, to actively participating in society, (re-)entering the job market as an employee or as a self-employed person, and starting up ventures. The study seeks to explore entrepreneurship competence not only as business creation, but also from a life-wide and life-deep perspective.

The concept of **entrepreneurial learning ecosystem** paves the way towards a broader understanding of the process of embedding entrepreneurship competence in VET as an interplay between three interlinked spheres: at policy, training provider and learning environment levels.

Figure 1 depicts structure, content and interactions in the VET entrepreneurial learning ecosystem.

Figure 1.

VET entrepreneurial learning ecosystem



Source: Authors.

Methodology

The study started with a **literature review** to trace progress in the debate on entrepreneurship competence in VET, and to identify methods, tools and approaches that support embedding it in VET.

Country case studies describe practice at policy/entrepreneurial learning ecosystem, VET provider and learner levels. They build an understanding of whether activities at each of these levels are consistent with one another and what the underlying reasons behind the findings are. Each of eight country case studies contributes to comparative analysis and to answering the research questions through:

- literature review/desk research at national level and preparation for the field research;
- field research at VET provider level;
- field research at policy level, i.e. interviews with policy-makers and experts in entrepreneurship.

For each VET provider, field research includes interviews with school directors (or, in the case of apprenticeships, company managers, owners, or HR managers) and VET teachers (company trainers/mentors in apprenticeships), focus groups (or interviews in apprenticeships) with VET learners, interviews with former graduates, and where possible, observations of class interactions during the delivery of entrepreneurship programmes.

Early findings from two pilot countries (Italy and Latvia) ⁽¹⁾

The research methodology was piloted in Italy and Latvia between September and December 2021. Six VET providers were selected in each country.

Case-sampling was purposive and is by no means representative of the population of VET providers in either country. The aim was to gain valuable insights into how entrepreneurship competence is embedded in VET. 'Information-rich' cases were therefore selected, namely VET providers with advanced understanding of the competence and a diverse portfolio of activities (curricular and extracurricular) delivered in collaboration with other stakeholders in the entrepreneurial learning ecosystem.

	Italy	Latvia
<i>Initial VET</i>	3	2
<i>Continuing VET</i>	1	2
<i>Companies providing apprenticeship</i>	2	2
<i>TOTAL</i>	6	6

Please note: In Session 2, the workshop participants will discuss the research methodology, its strengths and challenges, and will propose potential solutions for the forthcoming research in Austria, Croatia, Finland, France, Spain and Sweden.

Insights from the case study in Italy

Definitions

While the definition of entrepreneurship competence is generally consistent with the one in the European key competences framework for lifelong learning, in the field research, three working definitions for entrepreneurship competence emerged:

- for employability ⁽²⁾;
- as a sense of initiative ⁽³⁾;
- for business creation.

When thinking of entrepreneurship as key competence, it should be, however, noted that Italy is still experiencing the transition between a disciplinary approach and a competence-based approach to teaching; a competence-based approach to nurturing entrepreneurship can therefore not always be taken for granted – see challenges below.

Policy

There is no specific national strategy for developing an entrepreneurship competence in IVET, but rather a comprehensive approach for upper and lower secondary education. An entrepreneurship competence is often nurtured through the 'Pathways for transversal competences and guidance' (PCTO), previously called *Alternanza Scuola Lavoro*. Application of the PCTO is mandatory in upper secondary education, entailing either work experience, paths nurturing key competences (including entrepreneurship), or paths for self-guidance. These paths are mandatory in grades 11, 12 and 13. Concerning national strategy on how to develop entrepreneurship, in 2018 the Ministry of Education released the syllabus for

(1) Information about VET systems is available in Cedefop's 'VET in Europe' database: [Italy](#), [Latvia](#).

(2) Learning outcomes for employability are often 'implicit', and revolving around understanding how companies work and their role in society, teamwork and communication in the workplace, and developing a positive attitude towards the world of business.

(3) Drawing from the first (2006) edition of the European key competences framework.

entrepreneurship education. While the syllabus is based on the EntreComp framework and lists many learning outcomes and teaching and learning activities, these eventually revolve around business creation. The link between PCTO and entrepreneurship is apparent from the fact that the guidelines for PCTO contain the syllabus in annex.

VET provider level

Field research at VET provider level revealed that even when an entrepreneurship competence is intentionally developed, explicit learning outcomes related to the competence are difficult to find in curricula. With apprenticeships, the learning outcomes for entrepreneurship for employability are often implicit (not spelled out in curricula) and concern understanding how companies work and their role in society, teamwork and communication in the workplace, and developing a positive attitude towards the world of business.

According to the experts interviewed, during the past 2 years there has been an acceleration in regional policies (more targeted policies) promoting the building of local entrepreneurial learning ecosystems; ecosystems are mainly connected to the districts in Northern Italy. At the level of initial and continuing VET programmes, there is much diversity, with some VET providers having a limited entrepreneurial learning ecosystem to nurture an entrepreneurship competence, and others a vast one. Moreover, the ecosystem is dependent on the entrepreneurship programme being delivered.

When it comes to translating policies into local practices, funding plays a significant role. In 2017, the Ministry of Education launched a call for proposals on entrepreneurship education. ESF-co-financed projects of up to EUR 18 000 per school continue being implemented; around a quarter of eligible schools are participating.

Regarding how learning outcomes from the policy level translate into intended learning outcomes, the experts interviewed reported that less than 10% of VET providers know the 2018 syllabus or nurture entrepreneurship competence in their programmes. This is in line with findings from the field research, as interviewees were often unaware of the 2018 syllabus, even though it was attached to the PCTO, which they knew very well. In IVET, PCTO guidelines suggest 'practice enterprise' and 'enterprise in action' as methods, and service learning as pedagogy. Concerning CVET, there are no guidelines on how to promote entrepreneurship competence. Nevertheless, in a CVET course we found an interesting entrepreneurial project work, where learners apply what they have learned during the classes. In the case of apprenticeships, entrepreneurship competence is cultivated as participation in company activities, but we also found a VET provider delivering specific course modules in entrepreneurship.

An inspiring practice for developing an entrepreneurship competence as start-up creation is described in the box below.

The 4-year course in self-entrepreneurship at the Costa Institute in Lecce

The outlier Daniele Manni, winner of the 2020 Global Teaching Award, works at the Costa Institute. As part of the technical course 'Administration, finance and marketing' and within his subject (informatics) in the first biennium (grades 9 and 10), he delivers a start-up creation programme, from brainstorming to designing and implementing the idea (including website creation and marketing on social media). Sometimes the learners' ideas 'die' and are replaced by new ones. While this programme is part of the curriculum of the first biennium and is completed by the whole class, learners can develop their own ideas and passions in small groups as extracurricular activities in the following years. The most successful start-ups survive after learners complete their diploma and take on a full-time job, such as the case of the successful MaBasta to fight bullying in schools.
<https://www.mabasta.org/>

This case study found diverse features that highlight the advantage of VET in promoting entrepreneurship competence.

- Although, PCTO guidelines suggest using the same methods and pedagogies in vocational and general education, there is a substantial difference in the minimum and compulsory hours in second triennium (grades 11 to 13): 210 hours at the State vocational education (*istituti professionali*), 150 hours at the State technical education (*istituti tecnici*), and 90 hours in the general education programmes.
- VET displays strong connections to industry and professional networks. Company owners or managers are occasionally former VET graduates themselves returning to their former VET school to seek cooperation.
- VET teachers often have a background in private practice, bringing their network in communication with the VET provider and learners. Workshop assistants who help VET teachers in the lessons, though with less experience and contacts with industry, often have a similar background.
- Specific vocations lead naturally to private practice or provide the ideal ground for developing innovative ideas, or delivering business studies.
- At *istituti professionali*, entrepreneurship is considered as particularly suitable for learners, as they include hands-on training through entrepreneurship-related activities.

Assessment

The PCTO guidelines provide detailed information on how to design and assess the fully competence-based paths. Visits to the selected IVET providers confirmed the assessment scheme, although in a less articulated way; the learners' self-assessment part was subsequently often missing. The CVET course assessment was both formative, with blind peer assessment of the idea, and summative – for graduation – with an oral presentation of the idea and subsequent preparation of a food concept event, where learners had to turn their concept into a menu and prepare it. Concerning apprenticeships, learning outcomes for an entrepreneurship competence in one case were assessed through multiple choice tests, oral presentations and case studies, while in another case entrepreneurship competence for employability was more a by-product of participation in work activities, and therefore not targeted with specific assessment practises. Regarding the achieved learning outcomes, it is almost impossible to generalise, especially in the case of CVET. Beyond technical skills, by participating in company activities, apprentices learn to understand how a company works, and how to cooperate and communicate effectively with colleagues in a work environment.

Challenges

In the State IVET programmes, the challenges of promoting entrepreneurship competence relate to delivering competence-based education (instead of mere disciplinary knowledge). Indicatively:

- the present approach to teaching is mostly disciplinary and knowledge-based, so there is often a lack of the interdisciplinarity and teacher collegiality that would be necessary to cultivate an entrepreneurship competence;
- entrepreneurship competence is perceived as not related to the discipline that the teacher has to teach, and is therefore felt as an extra burden;
- teachers are hired based on academic merits and years of teaching experience; their contract is based on their teaching hours (generally 18 per week) as well as the core discipline they have to teach;
- only few teachers have been trained in entrepreneurship, and most of them haven't had significant experience in the industry world;
- schools seem to be overregulated, which makes the act of 'undertaking' difficult.

In apprenticeships at State level, no references to entrepreneurship were found in the policy documents. Concerning IVET, CVET and apprenticeships at regional level, there are

variations based on the region inspected, but nurturing an entrepreneurship competence is often not a priority.

The pandemic brought about significant disruption in the implementation of entrepreneurship competence programmes, since it was more difficult to interact with external partners. COVID-19 was also blamed for having changed the educational priorities at the VET providers' premises, who had to focus on implementing distance learning instead of applying the 2018 syllabus to their formative offer. Nevertheless, the case study reveals that digital technology helps entrepreneurial teaching and learning activities, making the subject more compelling and bringing it closer to the interests of young people, while also serving as a cost-effective way of maximising visibility in marketing ideas.

Insights from the case study in Latvia

The definition of entrepreneurship as a key competence in Latvia is aligned with the European key competences framework. According to the experts interviewed, the definition of entrepreneurship competence is also connected to the European EntreComp framework.

From the field research, three working definitions of entrepreneurship competence emerged in upper secondary education:

- as capability to start a business;
- as capability to turn ideas into action; and
- as capability to run an enterprise.

This indicates that the definition of entrepreneurship competence included in the recent State secondary education standard is not yet fully integrated in the VET system in Latvia. 'Creative activity and entrepreneurship skills' is one of the six transversal skills identified in the secondary education standard, which is an integral part of IVET.

Policy

Analysis of the national regulations on secondary VET shows that value creation is a mandatory topic for every learner in IVET and CVET programmes, as learners acquire entrepreneurial skills in a modular programme, where the module 'Initiative and entrepreneurship (Level 1)' is compulsory. Within the framework of this module, as well as the module 'Initiative and entrepreneurship (Level 2)', students explicitly acquire entrepreneurship competence. Levels 1 and 2 refer to difficulty levels. Entrepreneurial competence is also set to be acquired implicitly through other professional modules.

VET provider level

The field research shows that there is often no specific strategy at VET provider level for developing entrepreneurship competence as a key competence across all teaching modules. However, the experts interviewed see entrepreneurship competence not just as a separate module but rather as a competence that is systematically integrated in all professional subjects as a key competence. They estimated that positive results of a systematic development of entrepreneurship competence could be expected 4 or more years after the education system gradually implements the recently adopted (in 2020) competence-based approach.

In one VET provider, learners develop social projects promoting better engagement with society; for example, catering students make products specifically for the 'Regional culinary heritage centre'.

Interviews showed that VET teachers believe that entrepreneurship competence can be developed in study years 3 and 4, when learners have some experience in work. Perhaps this view is based on the understanding that entrepreneurship competence is only about starting a business. This indicates a narrow understanding of entrepreneurship competence by some teachers. Learners agree that the component of entrepreneurship competence as initiative is developed in various projects and group work, while communication skills are developed through carrying out presentations; however, these competences are not developed in all modules.

While the concept of an entrepreneurial learning ecosystem is not broadly used in VET, irrespective of type, policy documents envisage the development of key ecosystem components: curriculum, teacher training, employer engagement, and the existence of at least one example of a local or micro ecosystem (see box below). The Ogre VET network nurtures many elements of an entrepreneurial learning ecosystem, focusing primarily on extracurricular activities.

Ogre VET

A wide range of local, national and international stakeholders are networking to support the development of students' entrepreneurship competence, through:

- career education centres, a cooperation network composed of employers and professional associations, supporting VET learner careers;
- developing student learning enterprises in cooperation with Junior Achievement;
- the international project GOALS contest organised by Junior Achievement, in which participants develop international student learning enterprises (LV, EE, FI), and winners can gain work experience abroad;
- the conference 'Dare to win', a hackathon with enterprises, featuring job shadowing activities in enterprises;
- State agency scholarships (e.g. in forestry);
- the VET convention, where government, industry and municipality representatives work together to develop entrepreneurship activities for learners;
- peer learning activities, where graduates share their experience on how they have developed their enterprises.

Regarding digital, inclusive and sustainable entrepreneurship, VET providers are well-equipped, thanks to the appropriate management, teachers, modern equipment and environment. They have more potential for promoting digital and sustainable entrepreneurship compared to general secondary education institutions; however, this opportunity is not yet fully exploited. Research also shows that the promotion of digital, inclusive, and sustainable entrepreneurship in VET is supported by various State and Erasmus+ projects and the Junior Achievement programme. The last offers training for students and teachers to create student learning companies, various competitions, and fairs. International projects are also another important source of knowledge and experience for students and teachers, as they promote an understanding of digital and sustainable entrepreneurship.

When it comes to policies, methods, tools and approaches that best support embedding entrepreneurship competence in VET, the interviews with VET providers revealed that there is a combination of the following:

- a VET strategy covering the development of entrepreneurship learning and embedding of entrepreneurship competence;

- a common understanding and approach to developing entrepreneurship competence facilitated by State-level modules 'Initiative and entrepreneurship (Level 1)' and 'Initiative and entrepreneurship (Level 2)';
- VET learner interest in developing entrepreneurship competence stimulated by the VET culture, which supports each young person's personal growth, career, and participation in different events, where it is possible to develop entrepreneurship competence.

Teacher knowledge and skills in supporting learners in acquiring entrepreneurship competence are essential. The Junior Achievement programme plays a role in this by offering training for teachers as well. International projects that promote an understanding of digital and sustainable entrepreneurship are also a source of knowledge and experience for learners and teachers. Learner understanding of entrepreneurship, business processes and culture is enhanced by work-based learning.

Digital technologies also support embedding entrepreneurship competence in the teaching, learning and assessment processes in VET. Some teachers are optimistic, while others are less so. One VET teacher noted that 'digital technologies are one of the learning support elements, but unfortunately, when it becomes the only main element, like during a pandemic, it does not support learning entrepreneurship competence. So, it is best if it is one of the elements, alongside practical work'.

Our research shows that teachers receive support for the development of entrepreneurship competence in Latvia, but it is important to explore the provision of VET with teachers. The teachers interviewed shared the view that the current teacher training offer is broad with many opportunities to gain a better understanding of entrepreneurship competence. However, it only depends on the teachers' motivation and time to use these growth opportunities as their workload seems to be an obstacle.

Challenges

Secondary VET is developing rapidly. VET at local level seems to have intellectual resources and potential to create an effective entrepreneurial learning ecosystem, along with apprenticeship and work-based learning providers. However, there is currently no formal regulation (policy and strategy) defining the task for VET to do so. There is an obligation, however, for VET providers (through general knowledge subjects) to develop transversal skills, e.g. creativity and entrepreneurship as a competence, which implies a need for cultivating learning environments that support the development of this competence in many ways and through various support mechanisms.

Our research efforts to understand the phenomena in the field resulted in discovering good examples and practices that deserve attention. Work-based learning is considered a success story in this regard because it is a chance to bring employers and learners together. Unlike in internships, the employer also shares responsibility for competence acquisition.

Liepaja VET

The development and investment strategy of Liepaja State VET demonstrates active development of entrepreneurship competence by learners:

- education programmes include developing business plans;
- from 2016/17 to 2020/21, 115 student learning enterprises were established and were operational throughout the school year;
- since 2017/18, national and regional business fairs have been organised;
- the school leads the 'Business methodological centre', supporting other VET providers as well;

- the school jointly implements the project 'Three-level centres of professional excellence: qualification, entrepreneurship and innovation in the green economy'; the project aims at upgrading skills, securing a need for more young professionals/managers and entrepreneurs, and strengthening the competitiveness of SMEs in the green economy;
- one of the school's objectives for 2021-27 is to establish a student incubator to develop entrepreneurship.

Within the module 'Initiative and entrepreneurship', a teacher at Liepaja VET uses the concept 'Understand, learn, take on', which she created herself. This includes three steps towards acquiring entrepreneurship competence.

Please note: In Session 1 of the workshop, participants will discuss how entrepreneurship competence is understood and enacted in VET at national level in Italy and Latvia, and how these research results can help policy-makers, social partners, training providers and other stakeholders promote entrepreneurship competence in VET.