

# *Developing ecosystems to develop entrepreneurship skills*

*Evidence from the «Entrepreneurship competence  
in vocational education and training study» conducted for Cedefop 2021-2023*

**21/03/2024**

**Līga Baltiņa**

Head of Labour market and skills research unit

[baltina@fondazionebrodolini.eu](mailto:baltina@fondazionebrodolini.eu)



# Embedding entrepreneurial competence in VET

How is it...	Research questions
... DEFINED?	How is entrepreneurship competence <b>defined</b> in different VET settings?
... RESOURCED?	To what extent are the main <b>elements of the entrepreneurial learning ecosystems in place</b> in these countries and <b>how do they help</b> embed entrepreneurship competence in VET?
... IMPLEMENTED & MONITORED?	How do <b>national policies</b> translate into <b>local practices</b> ?
...PERCEIVED & ENACTED?	<b>What methods, tools and approaches</b> are applied and in what context? How are they different in VET compared to general education? To what extent do <b>VET characteristics facilitate embedding</b> of entrepreneurship competence in teaching and learning, and teacher training?
... ASSESSED ?	How does <b>assessment of entrepreneurship competence</b> support its development in VET? How do intended learning outcomes translate into learning outcomes eventually acquired by learners?

# Scope of the research

- **Eight countries:** Austria, Croatia, Finland, France, Italy, Latvia, Spain and Sweden
- **Data sources and collection methods**
  - Desk research (more than 700 policy and VET provider documents)
  - Interviews with policy makers, VET experts and social partners (over 30 interviews)
  - Interviews with school or company management (over 70 interviews)
  - Interviews with school teachers and work tutors/trainers (over 160 interviews)
  - Focus groups/ observations of VET learners (over 40 interviews)/
  - Online interviews with VET graduates (over 60 interviews)
  - Observations
    - A tour of the premises
    - Classroom observations

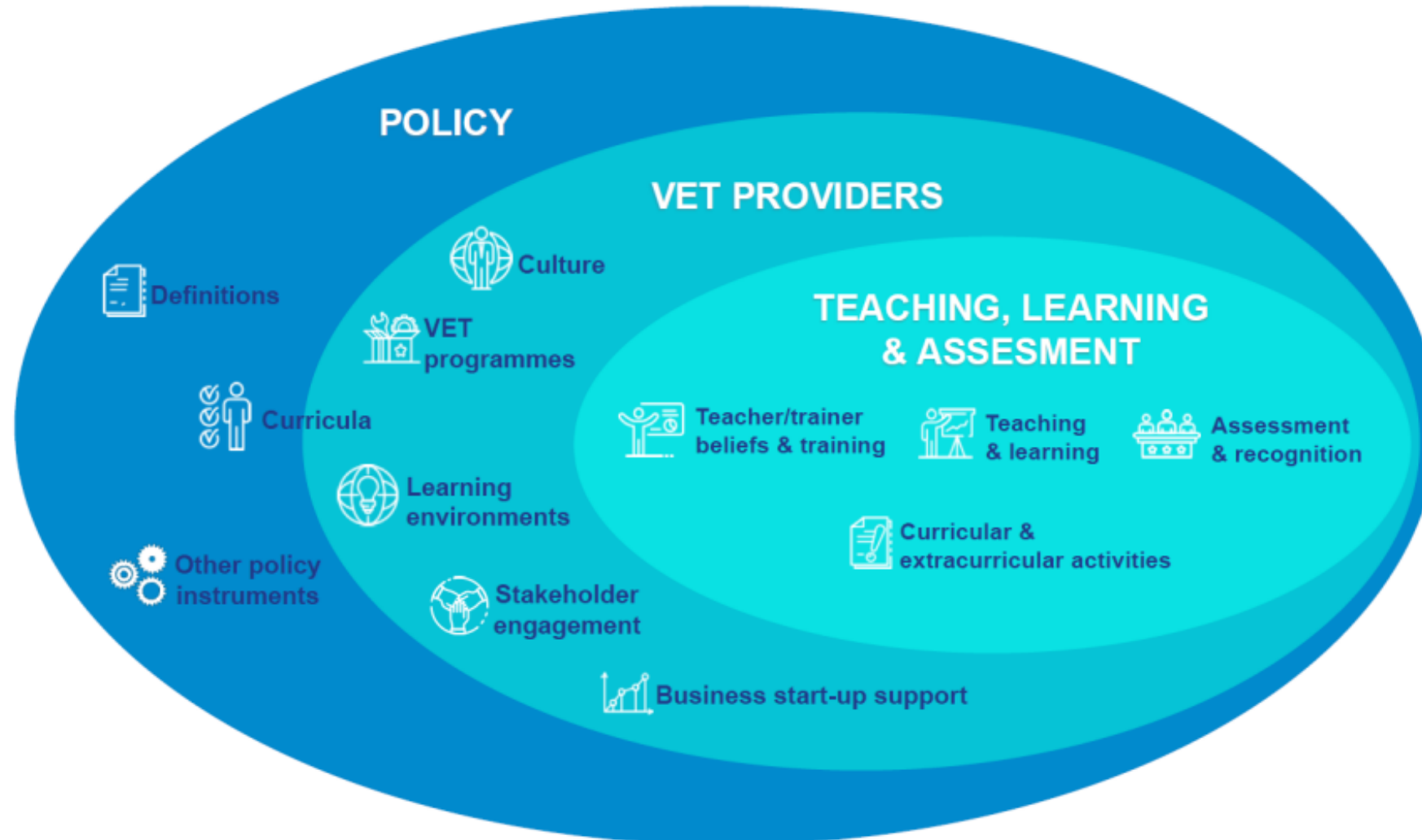
Deep insights into  
VET provider and  
learner level

# Definition of the entrepreneurship competence

- From broad to narrow definitions
- EU inspired: often derived from EntreComp and EU competence frameworks
- Not VET-specific
- At VET provider level:
  - as part of the skillset enhancing employability
  - more business related

Austria	'Enabling the individual to take the initiative and think and act independently as an entrepreneur, employee and as a consumer, to act actively and responsibly and thus help shape the economy and society' (Republic of Austria, 2014).	EntreComp
Croatia	'One of key lifelong competences needed [...] for everyone to build own (self-) employability and ensure personal development in the society of knowledge' (Croatia. Ministry of Science and Education, 2019).	EU key competences
Finland	'An ability to observe and seize opportunities; to transform ideas into action, which generates economic, cultural, social, or societal value.' (Finland. Ministry of Education and Culture, 2017b).	EU key competences

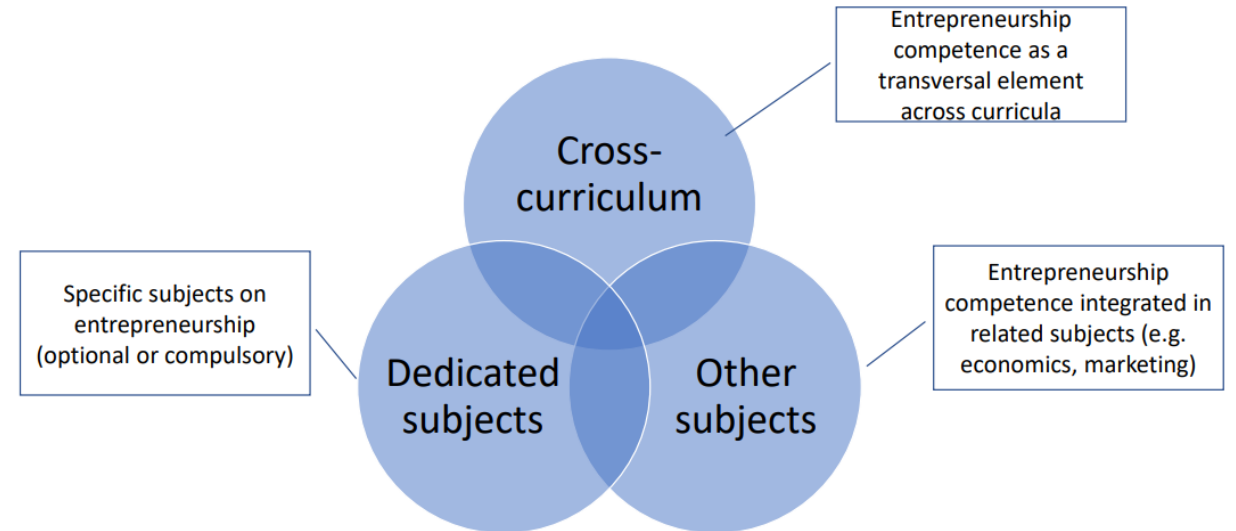
# Entrepreneurial learning ecosystems in VET



# Policy

- EU (e.g. competence frameworks, recommendations, support programmes)
- National (e.g. legislation, VET strategies, entrepreneurship education strategies, curriculum frameworks)
- Regional (e.g. strategies, support programmes)

## Curriculum frameworks



# VET provider dimension (1)

- Key role in developing entrepreneurial attitudes, aspirations and activity
- A need for a more organised, systematic and coherent way towards supporting the development of entrepreneurship competence in VET
- Culture (e.g. support from management, Inclusion of entrepreneurship competence in main school's documents)
- Importance of learning environments (e.g. innovation labs, laboratories)
- Stakeholder engagement (e.g. collaboration with local/regional partners, reliance of personal and professional networks of teachers)

The Ministry of National Education encourages the development of school-enterprise relations (*relation école-entreprise*) in VET. The Directorate General for School Education (DGESCO) facilitates the development of school-enterprise relations through offering services of school-business officers, engineers, and business advisors for the school. The business advisors are professionals proposed by professional organisations. One of their tasks is to bring the education world closer to the economic environment with a view to promoting entrepreneurship.

# VET provider dimension (2)

- Business start-up support (e.g. expertise of external partners, in-house incubators, alumni networks)
- Potential for cross-country learning

The entrepreneurial activities and initiatives at Ogre VET provider include interaction with local, national and international actors:

- career education centres, a cooperation network with employers and associations, for developing VET learner careers;
- cooperation with Junior Achievement Latvia supporting business simulations;
- international student training company contests;
- the Dare-to-win conference, including opportunities for learners to job-shadow in enterprises, and a hackathon with enterprises;
- the Latvian rural advisory and training centre's business contest, with a scholarship for the best idea; and Latvia State forests scholarship for excellence in entrepreneurship;
- a VET convention, where government, industry and municipality representatives work together to develop entrepreneurship skills for learners;
- opportunities for graduates to share their experience on how they have developed their enterprises.



# *The role of VET provider*

- Moving from isolated, teacher-drive initiatives towards more holistic and structured approaches in nurturing entrepreneurship competence in VET  
-> **it takes time.**

## What **characteristics of entrepreneurial VET provider?**

The Finnish Education Evaluation Centre in its evaluation of entrepreneurship in VET characterised the main practices of an entrepreneurial VET provider:

- disseminates entrepreneurship studies;
- stresses versatility, multidisciplinary and multi-methodology in entrepreneurship studies;
- encourages school-business cooperation;
- strengthens team entrepreneurship and practices real entrepreneurship;
- verbalises entrepreneurship skills, attitudes and knowledge;
- develops and monitors partnerships, networks and cooperation;
- follows-up and evaluates business activities and sets quantitative and qualitative aims for business cooperation, and monitors their implementation.

# Training, learning and assessment

- Teacher and trainer beliefs and training (e.g. industry experience, motivation; lack of time and excessive workload, full curricula)
- Lack of confidence, training and support to deal with the topic; usually not covered in initial teacher training

CIFP Río Tormes	CIPFP La Costera	CIFP Nicolás Larburu
- Agile methodologies;	- Challenge-based learning;	- Improvement of communication between teaching teams;
- Design thinking;	- Entrepreneurship Classroom;	- Flipped classroom;
- Transformation of learning spaces;	- Embedding entrepreneurship into teaching, learning and assessment plans;	- Migrant entrepreneurship;
- Visual thinking;	- Social entrepreneurship;	- Digital marketing;
- Canva;	- Sustainable development goals;	- Finance;
- Lego serious play;	- Gamification	- Introducing the gender perspective in entrepreneurship subjects
- Entrepreneurship training		

Source: [Case study Spain](#) (Cedefop, 2023e)

# Methods, tools and approaches

- Learner-centred
- Project-based learning
- Work experience
- Apprenticeships
- Mini companies
- Student cooperatives
- Virtual firms
- Extra-curricular activities (e.g. competitions, fairs, hackathons)

Mnemos is a project involving two subjects: Enterprise and entrepreneurial initiative and Video equipment maintenance. It aims to support therapies for Alzheimer's patients. In the first phase, learners contacted the Association of Relatives of Alzheimer's Patients and interviewed a team of therapists from the Alzheimer's National Reference Centre to detect their needs. The fruit of this work was the recording of scenarios in which 3D scanned objects were inserted to help patients fix memories through virtual reality. This project won the regional call for the [StartInnova contest](#).

# Assessment and recognition

- Competence-based assessment as a challenge
- Involving learners in the assessment
- Focus on a selection of skills (e.g. teamwork, creativity)
- Variety of activities (e.g. simulations, interviews, presentations) and tools

Finland	Use of grids with assessment criteria; sometimes use of peer evaluation	Assessment of learning outcomes
France	Observation and scoring grids for summative assessment	Authentic tasks
Italy	Oral feedback Scoring grids Oral presentations	Authentic tasks Use of single tasks Predominance of summative assessment
Latvia	Sometimes self-assessment	Single assessment tasks Use of authentic tasks Target: creativity and entrepreneurship
Spain	Informal observations Scoring rubrics Self and peer assessment	Non systematic Selection of a reduced number of skills to be assessed Involvement of the learner in the learning process
Sweden	Grids with assessment criteria	Use of formative assessment practices

For the final exam, pastry programme learners submit a thematic project (e.g. the typical cakes of Venice) requiring technical skills, mastery of the process, as well as skills related to project management. The learner prepares the pastries in a laboratory under the supervision of professionals in the trade, entrepreneurs, and trainers, and presents the outcome as a buffet.

The assessment criteria are project presentations; creativity; ability to develop a network around the project; budgeting; self-organisation; initiative, autonomy, taking responsibility; the ability to lead a team; reflexivity and critical thinking (concerning the project and its implementation); adaptation to different contexts.

# What are the main milestones....

- The **steering and support** of management teams
- More focused **stakeholder engagement**
- **Learning environments** supporting the methodological change
- **In-house business startup support** is reality for some but not all VET providers
- Moving **from isolated initiatives towards more holistic and structured approaches** takes time
- VET providers are progressing at **different pace**
- **Policies and schemes** supporting and recognising VET provider efforts

## Major milestones in entrepreneurship

Year	Description
2015-16	The incorporation of Jesús Fernández de Vera, is considered the key milestone in the deployment of the entrepreneurship agenda in IES Francisco Tomás y Valiente
2017-18	The new educational project foresees the creation of an Entrepreneurship Classroom, financed through a regional call for proposals. The first project in the Entrepreneurship Classroom is launched, to enable the development of entrepreneurial skills and facilitate pedagogical innovation.
2018-19	Organisation of the Entrepreneurship Fair had a very positive effect on teachers and learners as it allowed them to see the real value of their work and share experiences with another five VET providers in the Madrid region.
2019-20	Launch of the GarageLab project, a highly transformative initiative that seeks to motivate and empower Basic VET learners through collaborative work on digital fabrication projects for real users. Fundación Orange [Orange Foundation] finances the classroom equipment with 3D printers and other devices and trains teachers in SCRUM and Design Thinking methodologies.
2020-21	Inauguration of the MakerSpace and the Business Incubator. Both spaces were completed in May 2021. While teachers and learners have started using these spaces for specific activities, an ambitious programme is being designed to make the most of these learning environments.
<b>Challenges ahead</b>	Manage and make proper use of the incubator as a resource shared by VET learners from all sector branches and to help learner-led start-ups succeed. Have a transforming effect on the local community and consolidate as a flagship VET provider in the field of entrepreneurship.

# *Entrepreneurial learning ecosystems in VET*

What does a **mature entrepreneurship learning** ecosystem look like?

VET providers with a broad understanding of entrepreneurship [...] and an approach extending widely across programmes, creating a collective understanding of its importance and with high resource commitments and high stakeholder engagement in a broad range of curricular and extra-curricular activities

Each VET provider **has its own entrepreneurial learning ecosystem**, but at the same time it **is also part of larger ones** (e.g. regional). Entrepreneurial learning ecosystems evolve through time

# ***Thank you!***

**Spain** <https://www.cedefop.europa.eu/en/publications/5593>

**Italy** <https://www.cedefop.europa.eu/en/publications/5588>

**Latvia** <https://www.cedefop.europa.eu/en/publications/5585>

**Finland** <https://www.cedefop.europa.eu/en/publications/5597>

**Croatia** <https://www.cedefop.europa.eu/en/publications/5599>

**Sweden** <https://www.cedefop.europa.eu/en/publications/5598>

**Austria** <https://www.cedefop.europa.eu/en/publications/5595>

**France** <https://www.cedefop.europa.eu/en/publications/5596>