



VETInnovate

Transformation of VET Centres to become
regional leaders of inclusive, sustainable
and digital skills ecosystems

PILLAR 5: ECOSYSTEMS AND NETWORKS IN VOCATIONAL EDUCATION AND TRAINING. HOW TO ACHIEVE EFFECTIVE DUAL EDUCATION THROUGH PUBLIC PRIVATE PARTNERSHIPS



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the Autónomo Servicio Español para la Internacionalización de la Educación (SEPIE). Neither the European Union nor SEPIE can be held responsible for them.



Transformation of VET Centres to become regional leaders of inclusive, sustainable and digital ecosystems

Version History

Revision	Date	Author/Organization	Description
V0.1	24-03-26	FEMEVAL	Initial draft
V1.0	15-05-26	FEMEVAL	Final version

Table of Contents

Version History	2
Table of Contents	3
1. Introduction	4
1.1 Objectives	4
2. Definition of Ecosystems and Networks in Vocational Education	5
2.1 What is a VET Ecosystem and How does it benefit learners?.....	5
2.2 Dual education: Learning by Doing.....	5
2.3 Public-Private Partnerships (PPPs). What do they mean for a training?.....	6
2.4 Regional Ecosystem.....	8
2.5 Knowledge Exchange : Learning alongside experts.....	9
2.6 European and International Educational Networks	11
2.7 What does all this mean for the future?	13
3. Self-Assessment	13
4. KPIs.....	14
5. Transformation pathways and practical redommendations.....	16
6. Conclusion	17
7. References	18

1. Introduction

Vocational Education and Training centres cannot develop in isolation. To adapt to today's labour market, they must work within ecosystems that include companies, public administrations, universities, social partners and international networks.

Modern VET functions inside an ecosystem: a network of people, companies, institutions, professionals and opportunities that directly influence your learning and future career. This pillar explains how that ecosystem is created, why it is essential, and how you can benefit from it.

The main objective is to help you understand that VET centres is not only about learning content — it is about connecting with the world of work in a real and applied way. Companies, public institutions, training centres and European programmes work together so you can receive high quality training, acquire up to date skills, gain practical experience and, ultimately, access good employment opportunities.

1.1 Objectives

VETInnovate self-assessment framework has been developed in response to the growing demand from European VET institutions for practical instruments that support institutional transformation.

Pillar 5 Ecosystem and Networks in the field of VET: Achieving dual work-based education via public-private partnerships draws on the Self-Assessment Tool, which identifies how to take full advantage of VET centres: internships, real projects, dual training, international exchanges, collaboration with innovative companies and direct access to sector employers.

It builds further on EU priorities including the Digital Compass 2030, the European Skills Agenda, and the Accessibility Act, situating digital inclusion firmly within the broader context of Europe's twin digital and green transition.

VET programmes are characterised by their strong links with all productive sectors, making them an ideal environment in which to integrate advanced digital content, practical problem-solving methodologies and real-world entrepreneurial experiences. Moreover, VET centres have a privileged capacity to collaborate with companies, incubators, local authorities and other actors within innovation ecosystems.

2. Definition of Ecosystems and Networks in Vocational Education

2.1 What is a VET Ecosystem and How does it benefit learners?

A VET ecosystem is a structured network where training centres, companies, governments and other key actors interact with each other to improve education. It is not theoretical — it is what makes training useful, modern and aligned with real jobs.

The main elements of this ecosystem are:

- **The VET centre:** where you gain theoretical and practical foundations.
- **Sector companies:** where you learn in real professional environments.
- **Public administrations:** they regulate, finance and support your learning.
- **Teachers and workplace tutors:** they guide and support your development.
- **Other educational institutions:** universities, technology institutes, specialised training centres.
- **Europe and the world:** mobility programmes, international projects, knowledge networks.

Why is the Ecosystem Important?

Because occupations evolve rapidly. Technology changes, new jobs appear and new skills are required. Your training must constantly adapt — and this is only possible if the centre stays connected with external partners.

2.2 Dual education: Learning by Doing

Dual education combines learning at the training centre with learning in a company. It is the most direct pathway to employment because it allows you to learn exactly how work is carried out in real professional environments.

Dual VET combines classroom learning with real experience in companies, creating better prepared learners and centres that stay updated.

Benefits for Dual VET learners:

- Learning from real professionals.
- Access to modern equipment and current technologies.

- Applying knowledge every week in the company.
- A stronger CV from the very first day.
- Understanding workplace culture and company workflows.
- Direct access to the labour market through Dual VET.

In the most advanced dual models, up to 50% of the training can take place in a company. This makes learners highly prepared and adaptable professionals.

2.3 Public-Private Partnerships (PPPs). What do they mean for a training?

Public private partnerships (PPPs) are collaboration agreements between:

- VET centres
- Companies and organisations in the productive sector
- Public administrations (local, regional or national)

Their goal is to connect the world of education with the world of work in order to create up to date, practical training aligned with the real needs of today's professions.

In a labour market that is constantly changing, it is essential for training centres and companies to work together. PPPs ensure that training:

- is connected to real labour market needs,
- incorporates modern technologies and processes,
- adapts to sector changes,
- prepares learners for real professional challenges.

In short, PPPs make VET modern, useful and employment oriented.

Thanks to PPPs, learners can benefit from experiences and resources that would not be possible without close collaboration between centres and companies:

More complete, higher quality internships: real workplaces where learners apply what they have learned.

- Structured Dual VET: training is shared between the centre and the company, creating deeper, more practical learning.
- Workshops taught by industry specialists: professionals share current knowledge, trends and real tools.

- Participation in real challenges, projects and professional tasks: learners gain confidence and authentic experience.
- Use of modern machinery and technologies: companies provide access to tools that centres may not have.

PPPs also benefit teachers, allowing them to stay updated and connected to the real professional environment.

- They better understand company needs.
- They learn about new technologies and processes.
- They bring real cases into the classroom.
- They collaborate with sector experts to design relevant training.

This ensures that training remains current, relevant and high quality.

How PPPs are built?

PPPs follow an organised process to ensure collaboration is useful, safe and educational:

- Identifying relevant companies that can provide internships, projects or equipment.
- Initial meetings between centre staff and companies to explore needs and possibilities.
- Analysis of contributions: each partner defines what it can offer (spaces, equipment, mentors, trained learners, expertise, etc.).
- Signing a formal agreement that sets out rights, obligations, schedules, insurance, tasks and responsibilities.
- Designing a shared learning plan detailing what learners will study, how training will be organised and which competences will be developed.
- Assigning tutors: one in the company and one in the centre, coordinating the learning process.
- Ongoing monitoring through visits, meetings and evaluations.
- Final evaluation that is incorporated into the learner's official qualification.

What does this process guarantee?

These partnerships ensure:

- Safe training
- High quality training
- Training adapted to the professional world
- A smoother transition into employment

Thanks to PPPs, learners train in real environments, develop practical skills and build their first professional network.

2.4 Regional Ecosystem

The regional ecosystem is the group of companies, institutions, training centres, associations, public entities and social agents that work together to drive the economic and social development of a region. Every territory has its own needs, strategic sectors and growth opportunities, and Vocational Education and Training (VET) plays a fundamental role within that structure.

Each community or region prioritises key sectors based on its economy, natural resources, location, population and technological capacity. For example:

- **Tourism-focused regions** → specialise in hospitality, languages and tourism management.
- **Industrial areas** → require profiles in mechanics, robotics, advanced manufacturing and maintenance.
- **Agricultural regions** → focus on smart agriculture, biotechnology, logistics and food processing.
- **Technological regions** → develop in fields such as programming, AI, cybersecurity and renewable energies.
- **Regions with major hospitals** → need professionals in healthcare, laboratory work and social care.

Each region designs specialisation strategies to guide its economic future. VET actively contributes to these strategies because it trains the talent needed to make them possible.

VET centres do not only train students; they become **key agents of development**. This means:

- **Training centres provide talent.** Companies need qualified professionals, and VET supplies this specialised workforce.
- **Centres collaborate with companies and institutions.** They work together on projects, innovation, training and professional upskilling.
- **VET modernises productive sectors.** Through innovation projects, emerging technologies, laboratories and collaboration with companies.
- **Companies support dual training.** They host students, share training activities and participate in curriculum design.

Dual VET thus becomes a bridge between regional needs and learners' skills. Thanks to the collaboration between training centres, companies and public administrations, an environment is created where:

- Learners receive better training
- Companies grow and modernise
- The region becomes more competitive
- Society benefits from qualified professionals

2.5 Knowledge Exchange : Learning alongside experts

Knowledge exchange is one of the most valuable aspects of modern Vocational Education and Training. It means that training centres do not work alone—they collaborate with companies, professionals, institutions and other stakeholders to make learning dynamic, up-to-date and fully connected to what is happening in the labour market.

Instead of learning only from books or in the classroom, learners participate in real-world experiences where knowledge is shared between:

- Sector experts
- Specialised teachers
- Innovative companies
- Technology and research centres
- Public institutions and professional associations

This exchange makes training a living, updated process with direct impact on the skills learners develop.

Why is knowledge exchange so important?

Because the labour market is constantly changing: new technologies, new tools and new ways of working. If learning relied only on traditional content, it would become outdated very quickly.

Knowledge exchange allows:

- Keeping training constantly up to date
- Understanding how real professionals work
- Learning through current technologies, processes and trends
- Connecting with companies and building professional networks

- Linking classroom content with real-life situations

It ensures that VET prepares **real professionals**, not just students.

What activities form part of this knowledge exchange?

VET centres that are well integrated into their ecosystem organise many activities to connect learners with the professional world. The most common include:

- **Workshops and training delivered by companies:**
Sector specialists visit the centre to show real tools, explain case studies or work on challenges with students.

- **Courses taught by external professionals:**
Experts in their fields teach new methodologies, technologies or emerging processes.

- **Technical visits to real facilities:**

Learners directly observe how productive sectors operate: factories, hotels, mechanical workshops, hospitals, tech centres, laboratories... These visits allow them to understand the reality of the sector.

- **Talks on innovation and trends:**

Sessions on topics such as digitalisation, artificial intelligence, robotics, Industry 4.0, sustainability or circular economy.

- **Participation in fairs, conferences and professional events:**
Learners connect with companies, technologies, job opportunities and professional networks.

- **R&D projects:**

Centres collaborate with companies and research institutions on innovative projects involving learners—an effective way to learn how to solve real problems.

What do learners really gain from knowledge exchange?

These activities allow learners to:

- Experience more practical and motivating learning
- Acquire professional competences before entering the labour market
- Understand how curriculum content is applied in real settings
- Improve confidence and autonomy

- Develop transversal skills (teamwork, communication, creativity, problem solving)
- Build a valuable network of professional contacts

Many companies identify talent during these activities and later offer internships or positions through Dual VET.

All these activities have a clear purpose: **to ensure that learners go beyond the classroom and become fully capable professionals prepared for the challenges of the sector.**

Knowledge exchange transforms VET into training that is:

- More current
- More practical
- More innovative
- More connected to employment

2.6 European and International Educational Networks

European and international networks include Erasmus+, COVE and cooperation with universities and training centres in other countries.

What do learners gain from participating in international educational networks?

- **Internships in foreign companies** – experiencing different work environments
- **Understanding other educational and professional systems**
- **Improving language skills**
- **Increased employability**, since international experience is highly valued
- **Personal growth** – autonomy, adaptability, communication, multicultural teamwork
- **New professional opportunities**, including job offers abroad after Erasmus placements

The **Centres of Vocational Excellence (COVE)** are a European network of high-quality VET centres.

They are characterised by:

- Advanced technology
- Collaboration with innovative companies

- Participation in European applied research projects
- Membership of international learning communities

If a VET centre belongs to or collaborates with a COVE, learners gain access to:

- Cutting-edge equipment and laboratories
- Training in emerging skills (AI, green energy, robotics, etc.)
- Participation in international projects
- Interaction with highly qualified international staff

More and more VET centres are collaborating with foreign universities or research institutions to:

- Create joint projects
- Develop new training methodologies
- Research emerging technologies
- Establish international training pathways

This brings VET up to the level of advanced training across Europe.

How do we know the ecosystem works well?

Through 10 key indicators:

1. Company involvement in curricula
2. Participation in Dual VET
3. Engagement in regional projects
4. Collaboration with SMEs
5. Knowledge-transfer activities
6. International cooperation
7. Mobility opportunities
8. Satisfaction of companies and learners
9. Sustainability of partnerships

2.7 What does all this mean for the future?

It means that learners do not study in isolation. They are part of a living environment that supports them, offers opportunities and connects them to the labour market.

Thanks to these ecosystems, learners can:

- Receive better training
- Meet real professionals
- Access internships and Dual VET
- Travel and learn in other countries
- Prepare for a solid professional career
- Connect with companies from day one

3. Self-Assessment

The [VETINNOVATE self-assessment tool](#) evaluates digital transformation in VET centres through a set of indicators linked to the broader dimensions presented in this pillar.

The VETINNOVATE self-assessment framework is designed to help VET centre evaluate their current support and prepare VET learners for the digital & entrepreneurial skills transition.

At the [VETINNOVATE selfassessment tool](#), each KPI is scored on a scale of 1 to 5, where 1 indicates minimal or no capacity and 5 indicates exemplary practice.

Score		Description
1	Initial	Limited or no evidence of this capability. The area is at an early stage with no structured approach yet in place.
2	Emerging	Initial steps have been taken, but practice is informal, inconsistent, or limited in scope.
3	Developing	Structured approaches are in place, but implementation is uneven or not yet fully embedded.
4	Advanced	The capability is well-developed, consistently applied, and producing measurable results.
5	Transformational	The institution demonstrates best practice, serves as a model for others, and continuously innovates.

4. KPIs

Ten key indicators (KPIs) are established in order to assess the level of implementation of this pillar, ensuring full alignment between strategic priorities and measurable performance indicators.

1. Number of Active PPPs – Formal agreements with companies, chambers of commerce, or government bodies.
2. Employer Involvement in Curricula – Percentage of programmes co-designed with industry partners.
3. Work-Based Learning Participation – Proportion of learners engaged in apprenticeships or dual education.
4. Regional Ecosystem Engagement – Involvement in local development strategies and innovation clusters.
5. Joint Projects with SMEs/Industry – Frequency and scope of collaborative innovation or training projects.
6. Knowledge Transfer Activities – Number of initiatives sharing expertise between VET and business.
7. International Cooperation – Partnerships established through Erasmus+ or other EU programmes.
8. Mobility Opportunities – Percentage of learners and staff engaged in international placements.
9. Stakeholder Satisfaction – Feedback from employers, policymakers, and learners on partnerships.
10. Sustainability of Partnerships – Long-term continuation and scaling of PPP initiatives.

#	KPI	Description	Guided questions
KPI 1	Number of active PPPs	Counts the public–private partnerships currently in force with ongoing activities.	How many partnerships are fully operational? In which sectors is coverage higher or lower?
KPI 2	Co-designed curricula	Total number of curricula developed or updated through co-design with companies.	What percentage of the curriculum has been co-designed? Which competencies were incorporated?

KPI 3	Participation in dual training	Number or percentage of students participating in dual training programmes.	What percentage of student–company collaboration is achieved? What is the student completion rate?
KPI 4	Regional participation	Geographic reach of the programme and its intensity by region.	Which regions are underserved? Where should expansion be prioritised?
KPI 5	Projects with companies	Collaborative projects with companies (challenges, staff exchanges, applied R&D).	Which projects generate the greatest impact? What is the success rate?
KPI 6	Knowledge Transfer	Volume of outputs transferred and their adoption.	Which outputs are actually being used? What barriers hinder adoption?
KPI 7	International cooperation	Number and quality of international agreements or actions.	How many actions do we lead? What funding do we leverage?
KPI 8	Mobilities	Mobilities of students, teachers, and technical staff.	What percentage of mobilities is aligned with key competencies?
KPI 9	Employer satisfaction	Index measuring companies' satisfaction with the programme.	Which factors increase or decrease satisfaction?
KPI 10	Sustainability of partnerships	Degree of continuity and sustainability of partnerships.	Which factors increase or decrease satisfaction?

5. Transformation pathways and practical redommendations

VETINNOVATE self-assessment process is designed to be practical, transparent, and accessible for VET centers of different sizes and organisational structures. By following a structured sequence of steps, institutions can ensure that the assessment is conducted in a consistent and meaningful manner while engaging relevant stakeholders throughout the process.

VET institutions can follow a structured transformation pathway:

- **Step 1: Establish an Assessment Team**

The first step involves forming a small internal team responsible for coordinating the assessment process. This team should ideally include representatives of institutional leadership, teaching staff, administrative personnel, and where possible, external stakeholders such as industry partners or alumni. Their role is to ensure that the assessment is conducted objectively and that relevant data is collected from across the organisation.

- **Step 2: Collect Institutional Evidence**

The assessment team should gather evidence related to the ten key performance indicators. This may include internal reports, staff development records, infrastructure inventories, digital platform usage statistics, sustainability initiatives, and financial data. The objective is to provide a factual basis for evaluating institutional performance rather than relying solely on subjective perceptions.

- **Step 3: Score the Indicators**

Each KPI is evaluated using the five-level scale from 1 to 5. The team should discuss the available evidence and assign scores that best reflect the current institutional situation. Open discussion during this stage is important in order to ensure consensus and transparency within the evaluation process.

- **Step 4: Analyse the Results**

After scoring all indicators, the assessment team should review the overall results to identify patterns and key insights. Particular attention should be given to indicators with lower scores, as these often highlight areas where institutional development is needed. At the same time, high-scoring indicators can reveal institutional strengths that may serve as good practices within regional VET ecosystems.

- **Step 5: Define Improvement Priorities**

Based on the assessment results, institutions should identify a set of priority actions aimed at strengthening organisational capacity. These actions may include upgrading infrastructure, expanding staff training programmes, introducing new recognition systems, improving collaboration between departments, or strengthening sustainability policies.

- **Step 6: Integrate Results into Institutional Planning**

The results of the self-assessment should be incorporated into the institution's broader development processes. This ensures that the assessment leads to concrete improvements and contributes to the long-term transformation of the institution.

Through this continuous improvement cycle, VET institutions can progressively strengthen the ecosystem and networks in the field of VET; achieving dual work-based education via public-private partnerships.

6. Conclusion

The VETInnovate framework highlights the essential role of ecosystems and networks in modern Vocational Education and Training. By fostering strong collaboration between VET centres, companies, public institutions, and international partners, it enables more relevant, practical, and future-oriented learning. Through dual education models, public-private partnerships, and knowledge exchange, learners gain the skills, experience, and connections required to succeed in a rapidly evolving labour market. Ultimately, strengthening these ecosystems supports not only individual employability but also regional development and innovation.

By applying the VETINNOVATE self-assessment framework, institutions can identify their strengths, address areas for improvement, and develop strategies that support the development of inclusive, sustainable, and digitally advanced skills ecosystems.

VET centers must serve as regional engines of innovation, development, and competitiveness. Strong partnerships and ecosystems ensure that dual education is effective and sustainable.

7. References

- Guide Erasmus+ European Commission (2024–2027) <https://erasmus-plus.ec.europa.eu/programme-guide>
- The Digital Competence Framework for Citizens (DigComp 2.2), 2022 https://joint-research-centre.ec.europa.eu/digcomp_en
- EntreComp: The Entrepreneurship Competence Framework, 201 https://joint-research-centre.ec.europa.eu/entrecomp_en
- GreenComp: The European Sustainability Competence Framework, 2022 https://joint-research-centre.ec.europa.eu/greengcomp_en
- Council Recommendation on Vocational Education and Training for sustainable competitiveness [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020H1202\(01\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020H1202(01))
- European Skills Agenda https://commission.europa.eu/strategy-and-policy/skills_en
- Digital and Green Transition https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age_en
- Future of Jobs Report [https://www.weforum.org/reports/the-future-of-jobs-Future of Education and Skills 2030](https://www.weforum.org/reports/the-future-of-jobs-Future-of-Education-and-Skills-2030) <https://www.oecd.org/education/education-2030/>
- CEDEFOP. (2022). Digitalisation and the future of vocational education and training in Europe. https://www.cedefop.europa.eu/files/3094_en.pdf

