



CONCEPTUAL FRAMEWORK OF ENTREPRENEURIAL CENTRES OF VOCATIONAL EXCELLENCE

April 2024

This report was prepared by CARDET (Center for the Advancement of Research and Development in Educational Technology) for the European Training Foundation (ETF) and edited by Mariavittoria Garlappi and Jan Peter Ganter Otero from ETF.

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Introduction

The terms entrepreneurship, entrepreneurial learning and entrepreneurial mindset have been thoroughly discussed, explored and refined in a wide range of policy documents, reports and by various scholars. Entrepreneurship is considered a key competence1 by the European Commission, manifesting itself through value creation in all facets of life2.

Based on the experience of both the European Commission (EC) and the ETF, Centres of Excellence in Vocational Education (CoVEs) are vocational institutions recognised for their excellence in identifying and imparting relevant, high-quality, specialised technical skills. By contributing to regional skills strategies, they promote employment and regional development. They work closely with employers, including small and medium-sized enterprises, to foster innovation, applied research, entrepreneurship and reskilling.

Given the importance of CoVEs to drive innovation at economic and social levels, the ETF, by means of the ENE network3, has been working since 2021 on the concept of Entrepreneurial CoVEs as part of its work on promoting Vocational Excellence in partner countries of the EU. A dedicated partnership consisting of seven CoVEs in Azerbaijan, Georgia, Moldova, Morocco, North Macedonia and Tunisia has been working around an integrated approach including:

- A conceptual framework: the conceptual definition of an Entrepreneurial CoVE;
- A self-assessment toolkit: the tool for CoVEs to measure their level of entrepreneurial progress and set priorities for further improvement (aee Annex 1);
- Peer learning sessions: to learn about innovative entrepreneurial approaches (February-May 2022);
- Coaching sessions: individual support for each CoVE to produce new training products and identify new partners (September-December 2023 and March-May 2024);
- An ecosystem engagement toolkit: the tool for CoVEs to activate new partnerships within the
 ecosystem (expected by the end of 2024).

This document lays down the conceptual framework defining the Entrepreneurial Centres of Vocational Excellence (EntreCoVEs). It describes specific characteristics and activities that set them apart as being 'entrepreneurial'.

The ETF developed this conceptual framework based on its long-standing work in promoting entrepreneurial learning across vocational education and training systems with the aim of boosting employability in its partner countries.

The framework is a contribution for reflection to the community of researchers, policy makers and practitioners working on entrepreneurship and vocational training. Information regarding work done by the ETF related to EntreCoVEs is available on a dedicated webpage on the ETF portal⁴.

⁴ Entrepreneurial centres of vocational excellence | ETF (europa.eu).



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Council Recommendation of 22 May 2018 on key competences for lifelong learning Text with EEA relevance. (europa.eu).

The term 'entrepreneurship' refers to the concept of the entrepreneurial mindset/entrepreneurial skills as well as the capacity/support for start-ups. In this document, both concepts will be used as appropriate.

³ <u>Vocational excellence | ETF (europa.eu)</u>.

What are Entrepreneurial CoVES?

Entrepreneurial CoVEs possess unique characteristics that distinguish them from other CoVEs. These centres are renowned for their innovation-driven approach through which they prioritise significant changes in their practices, products, services, teaching, learning methods and relations with the overall ecosystem. Their continuous evolution guarantees value creation and relevance in economic, social and environmental contexts. By cultivating an innovative culture, entrepreneurial CoVEs encourage creative thinking, problem-solving and the development of an entrepreneurial mindset and business creation among their stakeholders. This focus on innovation enables them to adapt to changing societal and market needs.

Connectedness and networking are also integral to entrepreneurial CoVEs. They actively forge robust networks and collaborations with other training centres, organisations, community and industry partners. These connections foster collaborative activities such as idea-sharing, knowledge exchange, joint projects and partnerships. Such an approach promotes a thriving ecosystem that supports entrepreneurship growth, facilitates community and industry engagement and enhances vocational education and training quality.

Another key attribute of entrepreneurial CoVEs is their commitment to being a learning organisation which fosters a culture of continuous improvement and growth at all levels. These CoVEs champion innovation, experimentation and lifelong learning among their staff. They also prioritise digital transformation and environmentally sustainable practices by acknowledging the significance of digital skills and green policies.

Learners are central to their operations, with decisions on programmes, skills' development, operations and services steered by their needs and aspirations. Encouraging active young and adult learners' participation makes learners invaluable contributors to innovation and the overall educational process. This comprehensive approach underpins the unique identity of CoVEs and their effectiveness in nurturing entrepreneurship and entrepreneurial skills.

More detailed information on Centres of Excellence is available under Annex 2.



Conceptual framework of Entrepreneurial CoVEs

Overview

"Entrepreneurship is when you act upon opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural, or social", according to the European Commission⁵.

The EU Entrepreneurship Competence Framework (EntreComp)⁶ emphasises a diverse set of skills supporting among others individuals on personal development, lifelong learning, active citizenship, inclusion and employability. Employability may include being an entrepreneurial employee, being selfemployed or being an entrepreneur.

The framework for the entrepreneurial CoVE draws from several sources, including EntreComp, the "Innovation in TVET"7, lessons learned from specific ETF work in Tunisia8, the UNESCO-UNEVOC ihub⁹ initiative and research on innovation and entrepreneurship¹⁰.

An entrepreneurial CoVE is a training centre that demonstrates systemic entrepreneurial features infused across its organisational practices, ecosystem engagement, teaching and learning processes, as well as its products and services. It is a centre that identifies and acts on opportunities and ideas, transforming them into real-world initiatives and ventures that bring value (social, cultural, or financial) to individuals, groups and communities.

Dimensions of Entrepreneurial CoVEs

The framework employed in this report encompasses four dimensions, namely: (1) organisational practices; (2) relationships with the ecosystem; (3) teaching and learning; as well as (4) products and services.

Each of the four dimensions either directly or indirectly relates to all other framework dimensions. For example, improving the organisational practices of a CoVE can have direct impact on teaching and learning processes, on engagement with the ecosystem and on the products and services offered by the CoVE.

e.g., Covin & Slevin, 1991; European Commission 2014; Bosma et al, 2021; Covin & Lumpkin, 2011; Drucker, 1985; Galvin, 2020; Kirshner, 2019; Lampe et al, 2020; Lund & Karlsen, 2020; McKenna et al, 2020; Mason, 2012; Naumann, 2017; Scott-Kemmis, 2017; Vrasidas et al., 2016; Vrasidas et al. 2021; Wright, 2015.



The source of this definition is the Danish Foundation for Entrepreneurship & Young Enterprise.

The European Entrepreneurship Competence Framework (EntreComp) - Employment, Social Affairs & Inclusion - European Commission (europa.eu).

A study by Ganter de Otero (2019).

^{8 &}lt;u>https://openspace.etf.europa.eu/wikis/tunisia-case-0; The key competence lighthouse: Partnering for a more</u> entrepreneurial Tunisia | ETF (europa.eu).

https://unevoc.unesco.org/i-hubs/ to which ETF has contributed.

Entrepreneurial CoVE Conceptual Framework



Figure 1. Framework for entrepreneurial CoVES – Adapted from Ganter de Otero, 2019.

Organisational practices

The dimension of **Organisational practices** refers to the degree to which entrepreneurial features are evident in the vision and strategy of the organisation, its operational structure, the financing mechanisms, its human resource management and the processes in place for monitoring its work and its internal communications. Among the key elements and activities that an entrepreneurial CoVE demonstrates under this dimension are the following:

- 1. A well-defined strategy: Entrepreneurial CoVEs have a clearly-outlined strategy focusing on entrepreneurial objectives and activities. This strategy prioritises and provides a solid plan for implementing and monitoring entrepreneurial initiatives.
- 2. Leadership support: The leadership team in an entrepreneurial CoVE actively supports innovation and entrepreneurial endeavours. They participate in entrepreneurial activities, demonstrating that the development of entrepreneurship within the CoVE is a key priority.
- 3. Recognition and rewards: All staff members in an entrepreneurial CoVE are acknowledged and rewarded for their entrepreneurial competencies, activities and excellence in teaching and service. Active participation in entrepreneurial activities is integral to staff evaluation and promotion.
- 4. Internal monitoring and communication: Robust internal monitoring and communication processes are in place to ensure alignment with the entrepreneurial vision and actions. Clear methods and indicators are defined and implemented, and all are interconnected with the overall performance and long-term vision of the CoVE.
- 5. Digital strategy: An entrepreneurial CoVE has a digital strategy that is integrated with its entrepreneurial activities and vision. This could include a fully digital governance structure, online learning offerings, and operations based on a concrete digital plan or roadmap linked to entrepreneurial activities.
- 6. Diverse finance mechanisms and revenue generation: An entrepreneurial CoVE demonstrates an entrepreneurial mindset by generating revenue from diverse sources. This can be achieved through services provided to organisations (such as training, consultation, and research), funded projects and collaborative ventures. Actively pursuing diverse sources of revenue ensures the longterm sustainability of value-creating activities.



Ecosystem

The **Ecosystem** dimension refers to how a CoVE engages with key stakeholders, enterprises, and with economic and social partners when they build their networks, engage in advocacy activities and develop internationalisation strategies and activities. An entrepreneurial CoVE should feature the following indicators in terms of the Ecosystem dimension:

- 1. Implementation of an entrepreneurial vision in collaboration with key stakeholders: An entrepreneurial CoVE implements its entrepreneurial vision in close collaboration with key stakeholders. It establishes robust partnerships with these stakeholders, working together to design, implement and continually review the entrepreneurial vision. The collaboration is formal, structured and long-term, as demonstrated through strategic and ongoing agreements with relevant stakeholders.
- 2. Strong network with private and public stakeholders: An entrepreneurial CoVE takes part on formal networks with key private and public stakeholders and actively participates in entrepreneurial events and activities within the ecosystem. Additionally, the CoVE assumes a leading role within local, regional, national and international networks, such as participating in relevant fora, committees and associations.
- 3. Collaboration with enterprises for work-based learning: An entrepreneurial CoVE collaborates with enterprises to provide entrepreneurial internship opportunities, trainee placements and workbased learning activities. It establishes collaborations with local, regional, national and international stakeholders to ensure that learners have access to these opportunities. Such activities are incorporated into the CoVE's strategic plan, and they are regularly monitored and evaluated.
- 4. Strong external communication of entrepreneurial vision and actions: An entrepreneurial CoVE maintains strong external communication regarding its entrepreneurial vision and actions. It develops a solid and well-structured plan for external communication which may include institutional collaborations with media outlets and the implementation of inspiring communication campaigns. The plan for external communication is reviewed and evaluated annually.
- 5. Community engagement: A forward-thinking CoVE prioritises community engagement in order to foster a collaborative learning environment. It establishes partnerships with local community organisations, educational institutions and relevant stakeholders with the aim of creating a holistic educational experience for its learners. These engagements extend beyond traditional classroom settings, incorporating community-based projects, service-learning opportunities and outreach programmes to address local challenges and promote social and environmental responsibility.
- 6. Dynamic collaboration with innovation and science actors: An innovative CoVE proactively engages with key innovation and science actors to promote cutting-edge research and technological advancements. By fostering strategic partnerships with industry leaders, research institutions and government agencies, the CoVE creates an ecosystem that encourages knowledge exchange, research collaboration and the co-creation of pioneering solutions.

Teaching and learning processes

The **Teaching and learning processes** dimension refers to the degree to which entrepreneurial features are evident in pedagogical approaches, learner engagement and overall teaching and learning. The key activities of an entrepreneurial CoVE under this dimension include the following:

- 1. Real-world, collaborative, project-based Learning: An entrepreneurial CoVE emphasises teaching and learning approaches that are based on real-world, collaborative, project-based and authentic learning experiences. Most programmes should connect learning with real-world contexts and promote collaborative student learning.
- 2. Opportunities for entrepreneurial practice: An entrepreneurial CoVE allows learners to practice their entrepreneurial competencies. This can be accomplished through applied projects,



- entrepreneurship competitions and other practical experiences that allow learners to apply their entrepreneurial skills in real-world settings. The CoVE prioritises both intra- and extracurricular entrepreneurial learning opportunities.
- 3. Staff training on entrepreneurship skills: An entrepreneurial CoVE provides training and support to staff members, enabling them to integrate entrepreneurship learning frameworks (such as EntreComp) effectively into their teaching practices. Staff members are equipped with the knowledge and skills necessary for incorporating entrepreneurial competencies into their instruction.
- 4. Evaluation of staff integration of entrepreneurship skills: The degree to which staff members integrate entrepreneurship skills into their teaching becomes one of the evaluation criteria for staff reviews. This incentivises and recognises the efforts of staff members who actively incorporate entrepreneurial competencies into their teaching practices.
- 5. Addressing sustainable development goals (SDGs): Entrepreneurial activities and actions within an entrepreneurial CoVE should preferably align with SDGs¹¹. The CoVE should integrate SDGs into its overall strategy and action plan by explicitly linking entrepreneurial activities to sustainable development goals. This includes also support for the green transition. Concrete examples demonstrate how this connection and implementation can create value.
- 6. Career guidance and advice: An entrepreneurial CoVE offers career guidance and advice that specifically addresses entrepreneurial activities. It has a well-defined career guidance strategy to support the entrepreneurial development of learners and graduates, whether they intend to become employees, self-employed or entrepreneurs. This strategy is regularly monitored and evaluated to ensure its effectiveness in meeting the needs of learners.

Such indicators ensure that the teaching and learning processes within the CoVE are designed to foster an entrepreneurial mindset and entrepreneurship, integrate entrepreneurial competencies and provide practical experiences and support for learners on their entrepreneurial journey.

Products and services

The dimension of **Products and services** refers to the degree to which entrepreneurial features are evident in the design and delivery of offerings to external stakeholders such as enterprises, governments, communities and organisations (e.g. research and consultancy services, skills development, etc.). Research and innovation play an important role in entrepreneurial CoVEs, and research is a tool used to support the entrepreneurial activities and overall operations of the CoVE. The key activities of an entrepreneurial CoVE under this dimension include the following:

- 1. **Skills development and training:** CoVE's services primarily address skills development and training, aiming to equip learners with a comprehensive set of competences for the modern workforce in a lifelong learning perspective. It designs customised training programmes that integrate theoretical knowledge with practical skills which are tailored to meet the evolving demands of various industries and of society at large. The CoVE's emphasis on skills development is complemented by dedicated career counselling services, mentorship programmes, and industryrecognised certifications, ensuring that learners are well-prepared to navigate complex professional landscapes and pursue diverse career pathways.
- 2. Collaboration on applied research: An entrepreneurial CoVE actively engages in intensive, formal and well-established collaborations with enterprises and other socio-economic stakeholders for applied research projects. These projects are either directly or indirectly linked to entrepreneurial aspects and are guided by a long-term, structured strategy. Research and development activities within an entrepreneurial CoVE are closely linked to its entrepreneurial vision. They are integrated into the products and services the CoVE offers. Research and

¹¹ THE 17 GOALS | Sustainable Development (un.org)



innovation play a crucial role in driving the strategic objectives of the CoVE which are aligned with its entrepreneurial vision and aimed at creating value. The CoVE has a research plan with clear indicators and monitoring mechanisms that are evaluated annually.

- 3. Plan and financing for business incubators and start-ups: An entrepreneurial CoVE has a comprehensive plan and financing mechanisms in place to support business incubators and the establishment of start-ups. It actively encourages the creation of start-ups, spin-offs and other entrepreneurial entities, including self-employment initiatives and micro businesses. For instance, the CoVE follows a strategy that includes allocating specific funds annually to finance start-ups and provides ongoing support for their development.
- 4. Technology transfer and innovation consulting: An entrepreneurial CoVE offers technology transfer and innovation consulting services that align with its entrepreneurial vision. These services are fully aligned with the CoVE's entrepreneurial goals and are designed to facilitate technology transfer and provide expert consulting support. The CoVE monitors the impact of these services and evaluates the value they create.

These indicators highlight the CoVE's commitment to collaboration, innovation, supporting entrepreneurship and leveraging research and development to create value. By adhering to these indicators, an entrepreneurial CoVE can effectively develop and deliver products and services that meet society and market needs, foster innovation and contribute to the entrepreneurial ecosystem.



Indicators	How to	Dimension
Number of startups initiated by students or alumni within the first year of graduation.	Collect data through alumni networks, startup registries, and collaborations with local business development organisations. Encourage alumni to self-report their startup initiatives through regular surveys or dedicated platforms.	PS – Products and services
Percentage of business start-up and Entrepreneurial mindset programme graduates employed in positions related to their field within six months of graduation.	Collaborate with the Career Services department to track the employment status of entrepreneurship programme graduates. Conduct post-graduation surveys to collect data on the employment status of recent graduates.	PS
Total revenue generated by student-led ventures or startups originating from the business start-up programme in the last fiscal year.	Collaborate with alumni associations and Business Development offices to track the revenue of alumni startups.	SO – Strategy and Organisation
Percentage of entrepreneurship students securing internships with companies or startups, assessed annually.	Work closely with the internship placement office to track and analyse data on the number and quality of entrepreneurship-related internships. Utilise surveys and feedback from both students and employers to assess the impact of internships.	TL – Teaching and Learning
Number of alumni recognised for entrepreneurial success in industry publications or through awards, updated annually.	Regularly engage with alumni through interviews, surveys and social media to discover and document success stories. Monitor industry publications and award ceremonies for recognitions received by alumni.	PS
Number of ongoing partnerships and collaborations with local businesses, start-ups and community and industry leaders.	Maintain a record of ongoing collaborations through formal partnership agreements and MOUs. Use feedback sessions and periodic assessments with industry partners to gauge the success of collaborations.	ECO – Ecosystem engagement
Number of students receiving awards or recognition in entrepreneurial competitions at local, national, or international levels in the past academic year.	Monitor participation in entrepreneurial competitions and keep records of awards won by students. Engage with competition organisers and track announcements in relevant media.	TL
Number of patents filed or intellectual property creations resulting from projects within the entrepreneurship program.	Collaborate with the university's technology transfer office or legal department to track patent filings. Maintain a registry of intellectual property creations resulting from student projects.	PS
Average satisfaction rating of students in the business start-up programme based on an annual survey.	Administer regular satisfaction surveys to students within the business start-up program. Analyse data from surveys and conduct focus groups to gain qualitative insights into satisfaction levels.	TL
Percentage representation of underrepresented groups in the business start-up programme student body, tracked annually.	Collect demographic data during the admissions process and track diversity metrics. Regularly review and update diversity data through surveys and enrolment records.	ECO
Feedback from community and industry partners assessing the preparedness of graduates from the entrepreneurship program.	Conduct regular feedback sessions with community and industry partners, utilising surveys and meetings. Use collaboration agreements to include feedback mechanisms and performance evaluations	ECO
Number of networking events organised by the programme and student attendance rates.	Keep records of all networking events organised by the program. Monitor attendance through sign-up sheets, event registrations or digital platforms	PS



Indicators	How to	Dimension
Percentage of the curriculum dedicated to emerging technologies and the integration of these technologies into student projects.	Review course syllabi and curriculum documentation for the inclusion of emerging technologies. Monitor student projects and presentations for the application of emerging technologies.	TL
Percentage of recent alumni who have accessed post-graduation support services such as mentorship, funding assistance or ongoing resources.	Implement post-graduation surveys to understand alumni engagement with support services. Collaborate with alumni associations to track ongoing support utilisation.	TL



The journey towards a more entrepreneurial CoVE

CoVEs play a crucial role in nurturing an entrepreneurial spirit and entrepreneurship among individuals pursuing a vocational education. To enhance their capabilities in providing effective entrepreneurship learning and practice, these centres need to embark on a comprehensive journey of selfimprovement and adaptation. This journey involves several key steps that revolve around a preliminary self-assessment, followed by ecosystem evaluation and engagement, strategic development and the evolution of vocational excellence training products and services.

The journey can start from any dimension and continue covering the others. Ideally, all four dimensions need to be addressed in order for it to have a robust and comprehensive approach towards becoming a more entrepreneurial CoVE.

Regular assessment on progress in each dimension allows CoVEs to further develop its entrepreneurial capacity in a continuous way.

The self-assessment tool

The first step of this transformative process revolves around a **thorough self-assessment**. CoVEs must introspect on their existing infrastructure, expertise, curriculum relevance and the many others areas presented previously to identify areas for improvement. The self-assessment tool based on the conceptual framework is provided as separate document in Annex 1. It includes a number of questions and indicators for each dimension together with instructions for easy use.

Indicators are provided to help decision makers at CoVEs better asses their state of play and set objectives for the future. They can be used when doing the self-assessment so to identify quantitative and measurable results to be used as reference of progress in the journey of becoming more entrepreneurial.

Indicators are meant to be context specific and do not intend to provide any basis for scoring or comparison across CoVEs.



Evaluating and engaging the ecosystem

Establishing a strong relationship with the ecosystem is the second critical step. CoVEs should actively engage with local businesses, government bodies and community organisations in fostering a dynamic learning environment that encourages the exchange of ideas, resources and experiences. By fostering these strong relationships, CoVEs can keep pace with the pulse of the local market, thereby ensuring that their entrepreneurial training remains relevant and effective.

An ecosystem engagement tool linked to the conceptual framework is developed by ETF and provided as separate document¹² as a support to better engage with the different layers in the ecosystem.

Strategic and organisational development

The development of effective strategies and organisational practices is paramount. CoVEs should focus on fostering a culture of innovation, collaboration and adaptability within their institutions. This should be done through the establishment of clear objectives and goals, aligning them with the institution's mission and vision. Leveraging insights from successful entrepreneurial case studies and engaging with community and industry experts can provide valuable guidance in crafting a comprehensive and adaptable strategy. Additionally, fostering a culture of innovation and collaboration, and regularly evaluating and updating the strategy based on market dynamics, technological advancements and learner feedback are essential for sustaining a thriving entrepreneurial ecosystem within the CoVE.

Improving teaching and learning practices

Furthermore, the development of effective entrepreneurship teaching and learning practices is essential. CoVEs must integrate experiential learning, case studies and practical projects into their curricula to provide students with hands-on experience and real-world challenges. Encouraging critical thinking, problem-solving and teamwork can further instil the necessary skills and mindset required for achieving entrepreneurial success. Measuring the acquisition of entrepreneurial skills and mindset implies a new look at formative assessment through innovative methods and tools.

Innovative products and services

The evolution of vocational excellence products and services, such as immersive training programmes, business incubation facilities, and startup support services, can enhance the overall entrepreneurial experience for students. Offering mentorship programmes, access to funding, and networking opportunities can further enrich the learning journey and empower aspiring entrepreneurs to translate their ideas into successful ventures.

In short, by embarking on this multifaceted journey of self-assessment, ecosystem evaluation and engagement, strategic development and the evolution of vocational excellence products and services, CoVEs can equip themselves with the necessary tools and skills to effectively nurture an entrepreneurial spirit among their students and contribute to the growth of a vibrant and sustainable entrepreneurial ecosystem.

¹² This tool is expected by end of 2024



References

- Anthony, S. D., Cobban, P., Nair, R., & Painchaud, N. (2019). Breaking down the barriers to innovation. Harvard Business Review, 97(6), 92-101.
- Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Guerrero, M., & Schott, T. (2021). Global Entrepreneurship Monitor 2020/2021 Global Report. Global Entrepreneurship Research Association: London, UK.
- Carlson, C. R. (2020). Innovation for impact. Value creation and an active learning process. Harvard Business Review, 98(6), 124-133.
- Covin, J. G., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. Entrepreneurship: Theory & Practice, 16(1), 7-25.
- Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. Entrepreneurship theory and practice, 35(5), 855-872.
- Drucker, P. (1985). Innovation and entrepreneurship. London: Butterworth-Heinemann.
- European Commission. (2014). Final Report of the Thematic Working Group on Entrepreneurship. Education. https://ec.europa.eu/assets/eac/education/experts-groups/2011-2013/key/entrepreneurship-report-2014_en.pdf
- European Commission. (2019). Mapping of Centres of Vocational Excellence (CoVEs). ET2020 Working Group on Vocational Education and Training. https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8250&furtherPubs=yes
- European Training Foundation. (2020). Centres of Vocational Excellence: An Engine for Vocational Education and Training Development. An International Study. www.etf.europa.eu/en/publicationsand-resources/publications/centres-vocational-excellence-engine-vocational-education
- European Training Foundation. (2023). The key competence lighthouse: Partnering for a more entrepreneurial Tunisia | ETF (europa.eu)
- European Training Foundation. (2022). <u>The key competence lighthouse: Key-competence-driven</u> reforms in Ukraine and Georgia | ETF (europa.eu)
- Ganter de Otero, J. P. (2019). Innovation in TVET: UNESCO-UNEVOC Trends Mapping. UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training.
- Galvin, A. J. M. (2020). Centers of Vocational Excellence and Innovation (CoVes): A new era for Vocational Education and Training (VET) institutions? Academia, 18, http://hepnet.upatras.gr.
- Garvin, D. A. (1993). Building a learning organisation. Harvard Business Review, 71(4), 78-91.
- Garvin, D. A., Edmondson, A. C., & Gino, F. (2019). Is Yours a Learning Organization? Harvard Business Review, (Winter 2019 special issue), 86-93.
- Hansen, J. Ø., Jensen, A., & Nguyen, N. (2020). The responsible learning organisation: Can Senge (1990) teach organisations how to become responsible innovators? Learning Organization, 27(1), 65-74.
- Jong, J. P. J., Parker, S. K., Wennekers, S., & Wu, C. (2015). Entrepreneurial behavior in organisations: Does job design matter? Entrepreneurship: Theory & Practice, 39(4), 981-995.
- Kirsner, S. (2019). What companies that are good at innovation get right. Harvard Business Review Digital Articles, Retrieved from https://tinyurl.com/ek4dfzpe.



- Kools, M. & Stoll L. (2016). What Makes a School a Learning Organisation? OECD Education Working Papers, No. 137, OECD Publishing, Paris.
- Lampe, J., Kraft, P. S., & Bausch, A. (2020). Mapping the field of research on entrepreneurial organisations (1937–2016): A bibliometric analysis and research agenda. Entrepreneurship: Theory & Practice, 44(4), 784-816.
- Lund, H. B., & Karlsen, A. (2020). The importance of vocational education institutions in manufacturing regions: Adding content to a broad definition of regional innovation systems. Industry & Innovation, 27(6), 660-679.
- Naumann, C. (2017). Entrepreneurial mindset: A synthetic literature review. Entrepreneurial Business & Economics Review, 5(3), 149-172.
- Mason, C. (2012). Entrepreneurial learning: Conceptual frameworks and applications. Action Learning: Research & Practice, 9(1), 98-100.
- McCallum, E., Weicht, R., McMullan, L., & Price, A. (2018). EntreComp into action-Get inspired, make it happen: A user guide to the European Entrepreneurship Competence Framework. Publications Office of the European Union. publications.jrc.ec.europa.eu/repository/handle/JRC109128
- McKenna, A. N. N., Lichtenstein, G., Weilerstein, P., & Monroe-White, T. (2018). The Entrepreneurial Mindset: Using the Questions of What, Why, and How as an Organizing Framework. Advances in Engineering Education, 7(1), 1-8.
- Pisano, G. P. (2015). You need an innovation strategy. Harvard Business Review, 93(6), 44-54.
- Scott-Kemmis, D. (2017). The role of VET in the entrepreneurial ecosystem. NCVER, Adelaide.
- Senge, P. (1990). The Fifth Discipline: The Art and Practice of the Learning Organisation. Currency. Doubleday, New York.
- Vrasidas, C. (2016). Comprehensive external evaluation of the SEECEL activities. Report prepared for Southeast European Centre for Entrepreneurial Learning, Croatia.
- Vrasidas, C. et al. (2021). Developing the entrepreneurial competences of VET educators and providers. Report prepared for the VETentre project. https://vetentre.eu/.
- Wright, M. C. (2015). Organisational development and entrepreneurship converge: Building effective entrepreneurial organisations. American Journal of Management, 15(4), 39-47.



Annex 1: Self-assessment tool for Enterpreneurial **CoVEs**

Introduction

Becoming a more entrepreneurial CoVE is a journey that requires collective effort and strong commitment. The purpose of this reflection tool is to support CoVEs to reflect on the journey of becoming more entrepreneurial building around the four areas of work identified in the conceptual framework (see main document).

The tool guides CoVE teams in critically reflecting on their own practices, identifying their strengths and areas they can improve and planning their development strategies. Self-assessment can be repeated over time in order to develop a progress roadmap. Measurable indicators provided in the main text can be used to quantify progress and next steps.

Self-assessment, as opposed to quantitative analysis, brings a unique dimension to evaluating the state of entrepreneurship in a particular CoVE. The significance lies not only in the data it generates but also in the potential for engaging stakeholders in the implementation of the assessment tool. Unlike quantitative analysis that may focus solely on numerical metrics, the self-assessment tool serves as an instrument facilitating collective dialogue among various actors within the school. The tool is not designed to provide a definitive analysis but acts as a catalyst for discussions surrounding the challenges and opportunities in fostering entrepreneurship and nurturing the associated skills. By bringing together stakeholders, including educators, students, administrators and community and industry partners, the tool becomes a collaborative platform, fostering a holistic understanding of the entrepreneurship landscape within the CoVES and encouraging collective efforts towards improvement.

Structure of the Reflection Tool

As per the conceptual framework, the reflection tool is based on the four key dimensions below:

- 1. Organisational practices
- 2. Teaching and learning processes
- 3. Products and services
- 4. Ecosystem

There is a collection of statements for each dimension for supporting teams in reflecting on their centre's status. Within each dimension, the indicators are ranked into three development stages: Foundational, Developing and Mature.

Foundational: The foundational stage refers to the first phase in the life cycle of activities. These activities are conducted on a primary and fundamental level and an ad hoc basis. The CoVE has limited examples to demonstrate this particular dimension, and might only be starting out on its journey in terms of this particular indicator and dimension.

Developing: The developing stage refers to the progress achieved compared to the previous stage (Foundational). The CoVE can demonstrate several good examples in a particular area, and its activities are put into practiceregularly. There are also some examples of turning ideas into actions from various areas of the centre.

Mature: The mature stage refers to exceptional high-level activities and/or initiatives that are conducted on a systematic level. A CoVE can demonstrate several excellent examples of this indicator which clearly document the solid commitment of the centre in creating value and dealing with complex challenges in the local and global ecosystem they operate.

If no activity at all is undertaken at all in a given dimension, this can also be specified.



Examples of activities per dimension

There is an example in each box for each of the four dimensions as a possible indicative activity that demonstrates that stage. Note that there are many additional examples, and other examples that you feel better describe the stage in which you believe your centre is placed may be used.

In addition, in the last row for each dimension, there is an empty box that allows you, as an expert CoVE, to propose a statement/indicator, which is an important element of entrepreneurial COVEs, in your experience. Feel free to add as many rows and examples as needed.

Recommended process

Step 1. Team formation

Key stakeholders must be engaged in the process. Each CoVE should establish an internal team that will be engaged in the project. Members of this team can include representatives from the following groups:

- Management team;
- Teaching staff;
- Learners:
- Administrative staff.

Step 2. Meeting to discuss and complete the reflection tool

Before the meeting, the team members must have access to key documents that need to be reviewed to facilitate the discussions and areas of improvement. Before completing this, read the xonceptual framework for Entrepreneurial CoVEs which explains the core dimensions and features of entrepreneurial CoVEs in more detail.

Step 3. Sharing with stakeholders in the ecosystem - Optional

Bilateral/multilateral exchanges can be planned to discuss the reflection and finalise the areas of improvement with key stakeholders in the ecosystem. The aim is to help CoVEs see their state/progress through the eyes of their main partners.



Reflection tool

Background information

Name of the CoVE:
Website:
Name of the person responding:
Email of the person responding:
Names and role of the members of the team that responded:
Date:

Organisational practices

The dimension of **Organisational practices** refers to the degree to which entrepreneurial elements and activities are evident in the vision and strategy of the organisation, its operational structure, the financing mechanisms, its human resource management and the processes it has in place for monitoring its work and internal communications.

Instructions: Reflect on the statements/indicators below and select one of the three stages that correspond to your organisation's reality by completing the table below. In the right column (Comments – Examples), provide a comment and an example demonstrating the stage you selected for your centre for each statement/indicator. For each of the three stages, there is an indicative example of an activity that demonstrates that stage. Note that there are many additional examples, and feel free to use the "Comments – Examples" box to propose and present other examples that you think better describe the stage in which you believe your centre should be placed.



Statements/Indicator	Foundational (1) Just starting on working in this area	Developing (2) Made good progress and have some good examples to show	Mature (3) At an exceptionally high level with several excellent examples demonstrating this element	Level (1-3) Mark the number of the level you believe your CoVE is placed	Comments – Examples Briefly comment and provide an example demonstrating the level you selected for your centre for this indicator
There is a strategy where entrepreneurial objectives and activities are clearly defined.	The organisation's strategy includes some objectives that can be linked to entrepreneurial activity.	The strategy clearly defines entrepreneurial objectives and activities with a specific action plan.	The strategy states entrepreneurial activities as a key priority, and there is a solid plan to implement and monitor them.		
The leadership team is supportive of innovation and entrepreneurial activity.	The leadership team understands the importance of supporting entrepreneurial activities, but there are not many examples demonstrating this support.	The leadership team organises sessions and motivates the team to implement entrepreneurship activities with several examples to demonstrate the value creation through such activities.	The leadership team actively participates in entrepreneurial activities, and its actions clearly demonstrate that the entrepreneurial development of the CoVE is a key priority.		
Staff are recognised and rewarded for their entrepreneurial competences, activities and excellence in teaching and service.	The CoVE provides incentives for staff's entrepreneurial competencies and activities based on an informal procedure.	The CoVE follows a written – formal award policy for staff's entrepreneurial competencies and achievements.	Active participation in entrepreneurial activities throughout the year is an integral part of staff evaluation and promotion.		
There is strong internal monitoring and communication of entrepreneurial vision and actions.	There is an informal monitoring plan but no clear indicators for entrepreneurial activities and long-term vision.	There are clear indicators in the internal monitoring plan for entrepreneurial activities.	A solid method and indicators are clearly defined and implemented, and they are interconnected with the overall performance and long-term vision of the CoVE.		



Statements/Indicator	Foundational (1) Just starting on working in this area	Developing (2) Made good progress and have some good examples to show	Mature (3) At an exceptionally high level with several excellent examples demonstrating this element	Level (1-3) Mark the number of the level you believe your CoVE is placed	Comments – Examples Briefly comment and provide an example demonstrating the level you selected for your centre for this indicator
There is a digital strategy linked to entrepreneurial activities and vision.	The CoVE follows an informal digital strategy linked to entrepreneurial activities and vision.	The CoVE has a digital strategy in place and uses digital tools for some of its activities to increase in-house efficiency by digitalising processes like internal communication or product management.	The CoVE is fully digital in its governance, offers online learning and operations based on a concrete digital plan or roadmap linked to entrepreneurial activities and vision.		
The CoVE is entrepreneurial in generating revenue from the diversity of sources	The revenue of the CoVE is primarily based on tuition and fees for its programmes (or government funding it is a government supported institution).	The revenue of the CoVE is derived from alternative sources in some cases. The CoVE identifies and pursues diverse sources of revenue (e.g. consultation services for SMEs).	A diversity of sources generates revenue. e.g., Services to organisations (training, consultation, research, etc.), funded projects, collaborative ventures. The centre actively pursues diverse sources of revenue to make sure activities that add value can last in the long term.		
[Enter here a statement/indicator that demonstrates entrepreneurial activity. Add rows as needed]					
			Total score		



From the areas of the Organisational practices above, identify one to two good examples of activities that demonstrates strong entrepreneurial characteristics. Briefly discuss the example and highlight how this example demonstrates entrepreneurial features.

Examples	Discussion/Details	Entrepreneurial Features
1		
2		

Areas to Improve

From the areas of the Organisation practices Dimension, identify the two priorities for which you would like to improve. For each of the two areas, identify one to two key barriers that prevent your organisation from improving this area. Propose a few action steps you needed in order to improve each area.

Name of the area above that you want to improve	Identify one to two key barriers that prevent you from improving this area.	Define at least two actions/conditions that need to be in place to overcome the barriers and improve this area.
1		
2		

Teaching and learning processes

The Teaching and learning processes dimension refer to the degree to which entrepreneurial features are evident in the pedagogical approaches, learner engagement and overall teaching and learning approaches.

Instructions: Reflect on the statements/indicators below and select one of the three stages that correspond to your organisation's reality by completing the table below. In the right column, briefly comment and provide an example which demonstrates the stage you selected for your centre for each statement/indicator. For each of the three stages, there is an indicative example of an activity that demonstrates that stage. Note that there are many additional examples, and feel free to use the "Comments – Examples" box, to propose and present other examples that you feel better describe the stage in which you believe your centre should be placed.



Statement/Indicator	Foundational (1) Just starting on working in this area	Developing (2) Made good progress and have some good examples to show	Mature (3) At an exceptionally high level with several excellent examples demonstrating this element.	Level (1-3) Mark the number of the level you believe your CoVE is placed	Comments – Examples Briefly comment and provide an example demonstrating the level you selected for your centre for this indicator.
The EntreComp competencies are integrated across the curricula.	Some courses and programmes of study integrate the EntreComp in the curriculum.	Several programmes and courses integrate EntreComp. Staff training is offered on how to integrate EntreComp in their practice.	The majority of programmes and courses integrate EntreComp. Staff are trained to integrate EntreComp. One of the evaluation criteria for Staff reviews is the degree to which they integrate EntreComp in their teaching.		
Teaching and learning are based on real-world, collaborative, project-based, and authentic learning.	In some courses, staff use teaching methods which connect curricula to the world of work/to a real context.	Several modules (at least 50 %) of the training programme use teaching methods connected to the work/real context world and require collaborative learning.	The majority of programmes connect learning with the real world and require collaborative learning.		
Entrepreneurial activities and actions are encouraged that address the Sustainable Development Goals.	Some entrepreneurial activities and actions are encouraged that address the Sustainable Development Goals. This is not a well-established practice or part of the wider agenda of the CoVE.	The staff is engaged in entrepreneurial activities linked to Sustainable Development Goals, e.g., promotion of social entrepreneurship. Staff receive training on how to develop the entrepreneurial mindset of learners in addressing SDG related challenges.	Sustainable Development Goals are part of the overall strategy and action plan of the CoVE with an explicit connection to entrepreneurial activity with concrete examples demonstrating how this connection and implementation creates value.		



Statement/Indicator	Foundational (1) Just starting on working in this area	Developing (2) Made good progress and have some good examples to show	Mature (3) At an exceptionally high level with several excellent examples demonstrating this element.	Level (1-3) Mark the number of the level you believe your CoVE is placed	Comments – Examples Briefly comment and provide an example demonstrating the level you selected for your centre for this indicator.
Provides opportunities to learners to practice their entrepreneurial competences (e.g. applied projects, entrepreneurship competitions, etc).	The CoVE offers some opportunities to learners to develop their entrepreneurial competences.	The CoVE regularly offers learners several opportunities to develop their entrepreneurial competences. (e.g. opportunities for extra-curriculum activities on entrepreneurial learning).	The CoVE follows a particular strategy to provide opportunities to learners to practice their entrepreneurial competencies, both intra and extracurricular. The CoVE prioritises extracurricular entrepreneurial learning opportunities.		
Career guidance and advice is offered to address entrepreneurial activities.	The CoVE offers career guidance with limited connection to entrepreneurial activities and orientation.	The CoVE maintains a career guidance service that supports learners and graduates in developing their entrepreneurial skills through workshops and extracurricular activities.	The CoVE has a career guidance strategy to support the entrepreneurial development of learners and graduates as future employees or entrepreneurs. This strategy is monitored and evaluated regularly.		
[Enter here a statement/indicator that demonstrates entrepreneurial activity. Add rows as needed]					
			Total score		



From the areas of the Teaching and learning processes, identify one to two good examples of activities that demonstrates strong entrepreneurial characteristics. Briefly discuss the example and highlight how this example demonstrates entrepreneurial features.

Examples	Discussion/details	Entrepreneurial features
1		
2		

Areas to Improve

From the Teaching and learning processes areas, identify the two priorities for which you would like to improve. For each of the two areas, identify one to two key barriers that prevent your organisation from achieving improvements in this area. Propose a few action steps needed in order to improve in each area.

Name of the area above that you want to improve	Identify one to two key barriers that prevent you from improving this area.	Define at least two actions/conditions that need to be in place to overcome the barriers and improve this area.
1		
2		

Products and services

The Products and services dimension refers to the degree to which entrepreneurial features are evident in the design and delivery of offerings to external actors such as enterprises, governments, and organisations (e.g. research and consultancy services, skills development, etc.).

Instructions: Reflect on the statements/indicators below and select one of the three stages which corresponds to the reality of your organisation by completing the table below. In the right column, briefly comment and provide an example demonstrating the stage you selected for your centre for each statement/indicator. For each of the three stages, there is an indicative example of an activity that demonstrates that stage. Note that there are many additional examples, and feel free to use the "Comments – Examples" box, to propose and present other examples that you feel better describes the stage in which you believe your centre should be placed.



Statement/Indicator	Foundational (1) Just starting on working in this area	Developing (2) Made good progress and have some good examples to show	Mature (3) At an exceptionally high level with several excellent examples demonstrating this element	Level (1-3) Mark the number of the level you believe your CoVE is placed	Comments – Examples Briefly comment and provide an example demonstrating the level you selected for your centre for this indicator
Collaboration with enterprises and other stakeholders for applied research projects which are linked directly or indirectly with entrepreneurial aspects.	There is some non-formal collaboration with enterprises and other stakeholders for applied research projects.	The CoVE runs several applied research projects collaborating with enterprises and other stakeholders based.	There is an intensive, formal and well-established collaboration with enterprises and other stakeholders for applied research projects based on a long-term and structured strategy.		
Innovative services and products are designed and offered to serve the market needs.	CoVE offers only a few innovative services and products which serve mainly the needs of the local market.	CoVE offers several innovative services and products that serve the local, national, and regional markets.	CoVE has fully aligned its services and products with the local, national, regional, and international needs. CoVE also measures the impact of services and products in the ecosystem.		
There is a plan and financing mechanism for business incubators and support of start-ups.	There is no strategy in the CoVE for supporting start-ups, spinoffs, and other entities. The support is given on an <i>ad hoc</i> basis and sporadically.	The CoVE encourages and finances start-ups, spin-offs and other entities based on established guidelines.	Start-ups, spin-offs, and other entities are encouraged or created internally. The CoVE follows a strategy for supporting and financing the establishment of these entities, e.g. there is a specific annual fund allocated for financing start-ups.		



Statement/Indicator	Foundational (1) Just starting on working in this area	Developing (2) Made good progress and have some good examples to show	Mature (3) At an exceptionally high level with several excellent examples demonstrating this element	Level (1-3) Mark the number of the level you believe your CoVE is placed	Comments – Examples Briefly comment and provide an example demonstrating the level you selected for your centre for this indicator
The CoVE offers technology transfer and innovation consulting services in line with its entrepreneurial vision.	The CoVE offers limited technology transfer and innovation consulting services.	The CoVE offers technology transfer and innovation consulting services that align with some aspects of its entrepreneurial vision. The CoVE regularly works with enterprises offering such services.	The CoVE offers technology transfer and innovation consulting services that are fully aligned with its entrepreneurial vision. The centre offers such services and monitors their impact and the degree to which value is created from such activities.		
Research and development are linked with the entrepreneurial vision and fit into the overall products and services offered by the CoVE.	CoVE conducts some research which might be linked with the entrepreneurial vision. Research does not always fit into the overall products and services offered by the CoVE.	Several staff and departments engage in research linked with the entrepreneurial vision and fits into the overall products and services offered by the CoVE. There is a research plan in place, but not monitored regularly.	Research and innovation are driving the strategic objectives of the CoVE, which are linked to the entrepreneurial vision and creating value. There is research plan with clear indicators and monitoring in place, which is evaluated annually.		
[Enter here a statement/indicator that demonstrates entrepreneurial activity. Add rows as needed]					
			Total sscore		



From the areas of the **Products and services**, identify one to two good examples of activities that demonstrates strong entrepreneurial characteristics. Briefly discuss the example and highlight how this example demonstrates entrepreneurial features.

Examples	Discussion/details	Entrepreneurial features
1		
2		

Areas to Improve

From the areas of the **Products and services**, identify the two priorities for which you would like to improve. For each of the two areas, identify one to two key barriers that prevent your organisation from improving this area. Propose a few action steps needed in order to improve each area.

Name of the area above that you want to improve	Identify one to two key barriers that prevent you from improving this area	Define at least two actions/conditions that need to be in place to overcome the barriers and improve this area
1		
2		

Ecosystem

The **Ecosystem** dimension refers to how a CoVE demonstrates distinguished and essential features of an entrepreneurial centre, as they engage with key stakeholders, enterprises# and partners when they build their networks, engage in advocacy activities and develop internationalisation strategies and activities. Collective engagement in the processes of promoting entrepreneurial activities and innovation are essential in the holistic framework of an entrepreneurial CoVE. Peer learning across the ecosystem among CoVEs, employers, enterprises, social partners and government agencies is essential.

Instructions: Reflect on the statements/indicators below and select one of the three stages which corresponds to the reality of your organisation by completing the table below. In the right column, briefly comment and provide an example demonstrating the stage you selected for your centre for each statement/indicator. For each of the three stages, there is an indicative example of an activity that demonstrates that stage. Note that there are many additional examples, and feel free to use the "Comments – Examples" box, to propose and present other examples that you feel better describes the stage in which you believe your centre is placed.



Statement/Indicator	Foundational (1) Just starting with some work in this area	Developing (2) Made good progress and have some good examples to show	Mature (3) At an exceptionally high level with several excellent examples demonstrating this element	Level (1-3) Mark the number of the level you believe your CoVE is placed	Comments – Examples Briefly comment and provide an example demonstrating the level you selected for your centre for this indicator
The CoVE implements its entrepreneurial vision in close collaboration with key stakeholders.	The CoVE engages on a limited scale the relevant stakeholders to the implementation of its entrepreneurial vision.	The CoVE regularly engages relevant stakeholders in the implementation of its entrepreneurial vision. e.g., Regularly co-designs with stakeholders' entrepreneurial activities.	The CoVE has strong partnerships with key stakeholders, enhancing its effort to design, implement, and constantly review its entrepreneurial vision in ways that it creates value. This is formal and structured cooperation (not once off). Indicative activity is the sign of strategic and long-term agreements with related stakeholders.		
The CoVE has a strong network with key private and public stakeholders and participates in ecosystem entrepreneurial events and activities.	The CoVE is lightly connected with the ecosystem since it participates in limited entrepreneurial events and activities, mainly at a local level.	The CoVE is engaged with the local and regional ecosystem (e.g. has a strong network with private and public stakeholders). There are guidelines by the management for participation in several ecosystem entrepreneurial events and activities both at a local and regional level.	The CoVE follows a clear plan for network building and participation in local, regional, and intentional ecosystem events and activities (participates in key stakeholder meetings, networks, events, etc.). The CoVE also has a leading role within local, regional and international networks (e.g. participation in regional and/or international forum/committees/NGOs/associa tions).		



Statement/Indicator	Foundational (1) Just starting with some work in this area	Developing (2) Made good progress and have some good examples to show	Mature (3) At an exceptionally high level with several excellent examples demonstrating this element	Level (1-3) Mark the number of the level you believe your CoVE is placed	Comments – Examples Briefly comment and provide an example demonstrating the level you selected for your centre for this indicator
The CoVE collaborates with enterprises for engaging in internships, trainee placements, and Work-based learning (WBL) activities.	CoVE offers some opportunities for internship activities mainly on an ad hoc basis and not based on a structured plan.	The CoVE regularly collaborates with local and regional stakeholders to provide opportunities for trainee placements and Work-based learning (WBL) activities for the learners of CoVE.	The CoVE collaborates with local, regional, and international stakeholders to provide opportunities for trainee placements and Work-based learning (WBL) activities to all learners. There is a particular provision in the strategic plan of the CoVE, and these activities are monitored and evaluated regularly.		
There is strong external communication of entrepreneurial vision and actions.	The CoVE conducts some communication activities related to its entrepreneurial vision and mainly at a local level.	The CoVE conducts several communications activities related to its entrepreneurial vision. There is an informal communication plan for external communication.	There is a solid and well- structured plan for external communication related to its entrepreneurial vision and actions e.g. an institutional collaboration with media, and inspiring communication campaigns. This plan is reviewed and evaluated annually.		
[Enter here a statement/indicator that demonstrates entrepreneurial activity. Add rows as needed]					
			Total score		



From the areas of the **Ecosystem** dimension, identify one to two good examples of activities that demonstrates strong entrepreneurial characteristics. Briefly discuss the example and highlight how this example demonstrates entrepreneurial features.

Examples	Discussion/details	Entrepreneurial features
1		
2		

Areas to Improve

From the areas of the **Ecosystem** dimension, identify the two priorities for which you would like to improve. For each of the two areas, identify one to two key barriers that prevent your organisation from improving this area. Propose a few action steps needed in order to improve each area.

Name of the area above that you want to improve	Identify one to two key barriers that prevent you from improving this area	Define at least two actions/conditions that need to be in place to overcome the barriers and improve this area
1		
2		



Annex 2: Key features of Centres of Vocational Excellence

CoVEs aim to drive innovation and excellence in vocational education and training, by bringing together a wide range of local partners such as VET providers (at both secondary and tertiary levels), employers, chambers, research centres, development agencies, employment services and social partners (among others), to co-create skills ecosystems that contribute to regional economic and social development, innovation and smart specialisation strategies.

Erasmus+ Programme Guide, 2021-2027

Centres of Vocational Excellence (CoVEs) are local networks bringing together a wide range of partners to co-create skills ecosystems for innovation, regional development and social inclusion. They are international collaborative networks sharing expertise and know-how among partners. Further CoVEs are hubs for VET Excellence rapidly adapting skills provision to evolving economic and social needs including digital and green transition. CoVEs are: inclusive ensuring learner centre approach and providing opportunities for lifelong learning; innovative in teaching and learning approaches and methodologies; partnership -oriented to push strong cooperation among VET providers and social and economic actors while ensuring effective governance and financial sustainability of the skills ecosystem.

CoVEs achieve their objectives by bringing together and working closely with a set of local/regional partners such initial and continuing VET providers, higher education institutions including universities of applied sciences and polytechnics, research institutions, science parks, innovation agencies, companies, chambers and their associations, social partners, social enterprises, sectoral skills councils, professional/sector associations, national and regional authorities and development agencies, employment services, qualifications authorities, social inclusion and reintegration organisations.

Further, while working with CoVEs in other countries through international collaborative networks, they establish a bottom-up approach to vocational excellence involving a wide range of local stakeholders enabling VET institutions to rapidly adapt skills provision to evolving economic and social needs. They stimulate local business development and innovation, by working closely with companies (in particular SMEs) on applied research projects, creating knowledge and innovation hubs, as well as supporting entrepreneurial initiatives of their learners.

EC/DG Employment, Social Affairs and Inclusion (2022)

CoVEs are engines for VET development: high-level quality VET -skills institutions- to support employability and matching labour market needs - CoVEs are beacons for VET reforms (within LLL perspective). However, CoVEs institutions operate in different and diverse EU Member States- ETF PCs and in other international contexts, so taking place and flourishing on different VET cultures, types of VET institutions (etc.) and this is key to address and operational concept. Overall, CoVEs are good examples, best practices. CoVEs are VET provider leaders (or clusters, networks etc.). CoVEs are also VET institutions with high commitment to promote change and continuous development and improvement. CoVES are also examples of effective partnerships between public and private-key stakeholders (for shaping skills ecosystems). CoVEs are hubs for transferring good practice at national and international levels (partners for progressing on VET internationalization). The ETF looks at VET Excellence and CoVES in inclusive manner as both concepts helps on creating great opportunity connecting both policy and provider-grassroots levels, to impulse image and role of VET in society and economy via transferring transmitting the best experiences of VET leader institutions to others VET providers for example, interacting on national and international networks and support them improving and develop (ETF, 2020).



The ongoing ETF experience working with EC informs on Centres of Vocational Excellence (CoVEs) as ecosystem, network organisations, emphasising cooperation with other actors and its role on regional socio-economic development-. Centres of Vocational Excellence (CoVEs) might be VET Providers, groups of VET Providers and/or organisations that coordinate other VET Providers, that collaborate with economic, educational, social, and political partners and help to create local 'skills ecosystems' aiming to provide high quality VET skills as well as to contribute to regional development planning and growth. CoVEs are key institutional set-ups too inform on moving towards vocational excellence policies to impact system in a given country.

Their excellence can be described in terms of:

- Extended scope of their activities (more functions);
- Extended Quality -assurance approaches, tools- meaning high quality of their performance and their capacity to respond and develop to meet the needs of their stakeholders and citizens (users);
- CoVES play a leadership role in the national or regional VET system, acting as a model, coordinator or pathfinder for other VET Providers.
- CoVEs build taking into account capacities (networking, expertise, cultural richness, etc.) of a specific VET community- working together towards excellence and role of CoVEs to shape excellent skill ecosystems.

Becoming a CoVE is a process of maturing. For example:

- At the first stage, the CoVE begins improving on what VET normally does, with close linkages to the labour market. For example, curricula and programmes are adapted to the needs of the labour market:
- At the second stage, the CoVE improves strategic development by playing a more active role in skill anticipation mechanisms to ensure a close match of VET to labour market needs.

At its third and mature stage, the CoVE achieves excellence by co-creating local skills ecosystems, local innovation and regional development.

CoVEs are formed by networks of different partners that develop local skills ecosystems at both national and international levels. ENE experience informs that, typically, four types of CoVEs shape its operational concept:

- High-quality single vocational education and training institution;
- High-quality single vocational education and training institution which might coordinate other VET providers (networker-leading role);
- Cluster composed by a number of high-quality vocational education and training institutions (e.g. at sector, regional/local level);
- Ecosystem (platform) composed, among others, by high-quality VET providers, universities of applied sciences, employers, research centres, development agencies, employment services, local authorities (etc.).

Source: ETF 2024 (publishing ongoing)

