### #EUVocationalSkills #EUVocationalExcellence





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#### Content



1) INNOVATION

"Science" based and

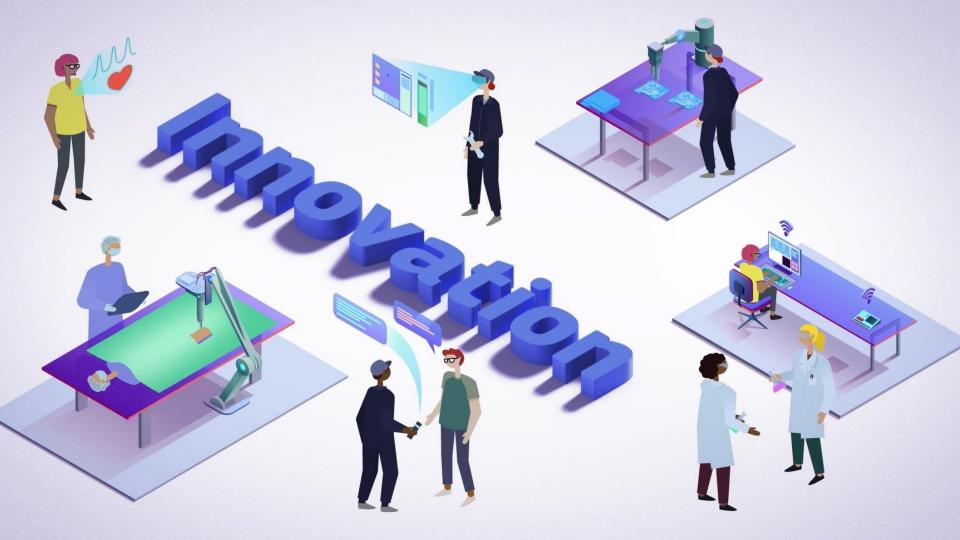
"Practice" based Innovation



- 2) CENTRES OF VOCATIONAL EXCELLENCE (COVE)

  Vocational Education and Training "fit" for the future
- 3) THE WAY FORWARD: POLICY, FUNDING, AND SUPPORT SERVICES

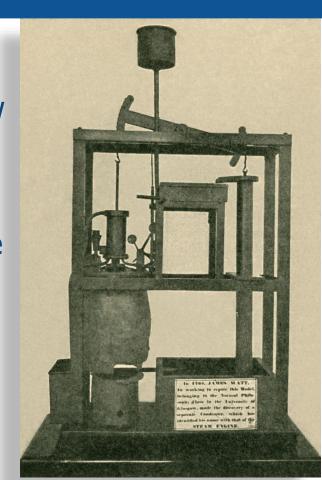
  A favorable environment for effective implementation of CoVEs



# The invention of the Steam Engine



- In the 1760s an instrument maker and repairman at the University of Glasgow was asked to repair a model of the Newcomen Pump.
- James Watt the repairman not the university professor or professional researcher - identified the problem, solved it, and set in motion the Industrial Revolution that followed.



Burke, J. (1978), "Connections: An Alternative View of Change", BBC documentary series, https://archive.org/search.php?query=subject%3A%22connections%22%20creator%3A%22james%20burke%22

# Understanding "Science" based and "Practice" based Innovation

Science-based - Science, technology, innovation
According to the Innovation in Europe survey, only 4% of innovations are based on academic research.

#### Practice-based - Doing, using, interacting

The survey also shows that the most significant sources of innovation are customer contacts, company networks and the like. These produce 96% of innovations.

Innovations usually evolve from a **practical need**, and they are developed in a context that is far removed from the environment where scientific innovations are produced.



Vesa Harmaakorpi Professor of Innovation Systems at Lappeenranta University of Technology, Lahti Area, Finland

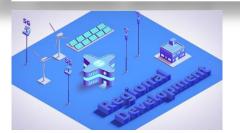


Centres of Vocational Excellence (CoVEs)...

## CoVE's fostering local/regional "Skills ecosystems"

### CoVEs an integrative part of skills ecosystems, contributing to:

- Innovation,
- Regional development,
- Smart specialisation strategies,
- Cluster strategies









#### **Bringing together:**

- VET institutions
- Universities of applied science
- > Research centres
- Companies
- > Chambers
- Professional or sector associations
- > Trade unions
- Policy makers
- > Employment services/agencies
- Regional development agencies
- > Municipalities

# Centres of Vocational Excellence The initiative

#### **Foster Vocational Excellence at two levels**

#### **NATIONAL**

### Through Centres of Vocational Excellence (CoVE)

Operating in a given local context, embedding them closely in the local innovation and skills ecosystems, working with businesses, chambers, tertiary education, research institutions, public authorities, etc.

#### **TRANSNATIONAL**

Through **Platforms of CoVE's** to establish world-class reference points for VET by bringing together partners that share a common interest in:

- Specific sectors/trades such as aeronautics, e-mobility, green technologies, healthcare, textiles...
- Societal challenges such as integration of migrants, Digitalisation, AI, SDG, upskilling and reskilling...

### Typical activities of CoVE's

Pro-active partner in local development



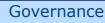
Regional development, Smart Specialisation, Knowledge triangle



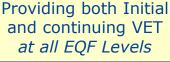


**ESSEUROPE** 





(social partners, national and local governments VET providers, development agencies...



Innovative curricula, & Teaching & training methodologies (PBL, Interdisciplinary...)



Cost-sharing, sustainable funding, and effective use of EU funding

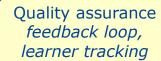


Higher VET, and Flexible pathways with Schools and Universities



Technology diffusion and Innovation Hubs









**Incubators** supporting entrepreneurial initiatives



Partnerships for: Skills anticipation, Apprenticeships, T&T exchanges...

Validation and Guidance





# VET policy contributing to overall EU strategy and goals

- ✓ EU Strategic Agenda and Political guidelines
- ✓ The European Pillar of Social Rights Action Plan
- ✓ The update <u>Skills Agenda</u>
- ✓ The European Education Area
- √ The <u>Digital Education</u> Action Plan
- ✓ <u>Industrial Strategy</u> for Europe (Skills4Industry)



✓ The UN **Sustainable Development Goals** 

## **Centres of Vocational Excellence** *Erasmus+ 2019 Pilot projects*



Advanced Manufacturing 4.0 https://examhub.eu/



Commission

Water sector <a href="https://povewater.eu/">https://povewater.eu/</a>



Digital Innovation Hub for Cloud Based Services https://dihubcloud.eu/

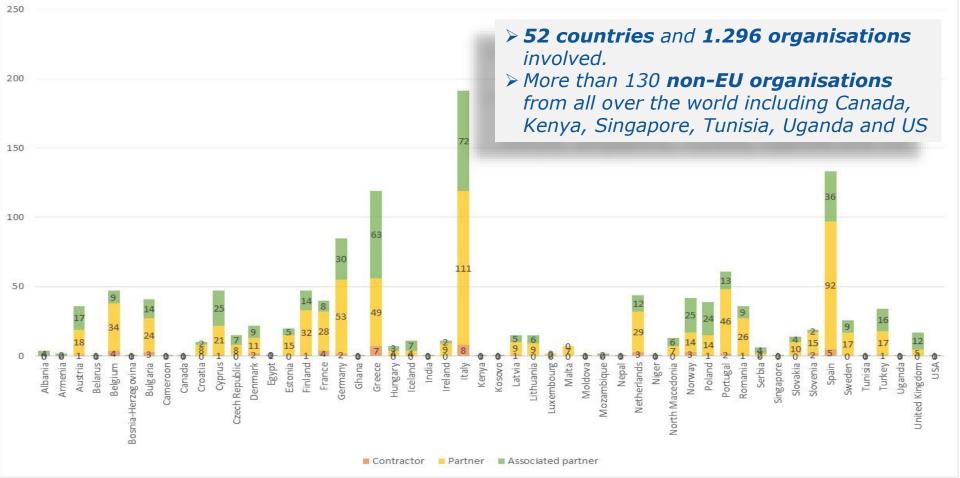


Cultural and creative industries <a href="http://deuscci.eu/">http://deuscci.eu/</a>



IoT in Smart manufacturing <a href="https://talentjourney.si/">https://talentjourney.si/</a>

### ERASMUS+ 2020 - KA3 CALL FOR CENTRES OF VOCATIONAL EXCELLENCE COUNTRIES PARTICIPATING IN PROJECT APPLICATIONS, BY ROLE



## CoVE Support Service 3 hubs (indicative proposal)

#### Knowledge

Providing evidence, research, information, tools and methodologies

- Newsletters
- Scientific research
- > Skill intelligence
- Policy briefs
- Guidelines
- Examples of good practices
- > Interactive mapping
- **>** ...

### **Capacity building**

Stakeholder engagement in collaborative sharing of knowledge, know-how, and competence

- Expert steering group
- Peer learning activities
- Networking opportunities
- Seminars/Workshops
- Other events
- > Internationalisation
- **>** ..

## Technical assistance & counselling

Providing expert support and general guidance to VET organisations and authorities

- Technical assistance on project implementation
- Use of tools and methodologies
- Coaching and training
- Information on sources of EU and national funding
- Evaluation
- > ...

One single digital platform + links to relevant websites

#### **Resources on CoVE's**



- 1) European Commission mapping study on approaches to **Centres of Vocational Excellence** https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8250&furtherPubs=yes
- 2) European Training Foundation: **Centres of vocational excellence an engine for VET development?** An international analysis <a href="https://www.etf.europa.eu/en/document-attachments/centres-vocational-excellence-engine-vet-development">https://www.etf.europa.eu/en/document-attachments/centres-vocational-excellence-engine-vet-development</a>
- 3) Joint Research Centre: **The role of VETin Smart Specialisation Strategies**<a href="https://s3platform.jrc.ec.europa.eu/-/skills-and-smart-specialisation-the-role-of-vocational-education-and-training-in-smart-specialisation-strategies">https://s3platform.jrc.ec.europa.eu/-/skills-and-smart-specialisation-the-role-of-vocational-education-and-training-in-smart-specialisation-strategies</a>
- Cedefop Briefing note Innovation and training: partners in change https://www.cedefop.europa.eu/en/publications-and-resources/publications/9103
- 5) UNESCO-UNEVOC study on **Innovation in technical and vocational education and training (TVET)** https://unevoc.unesco.org/go.php?q=UNEVOC+Publications&lanq=en&null=&akt=id&st=&qs=6273
- 6) OECD Report on **Regions in Industrial Transition**, Policies for People and Places <a href="http://www.oecd.org/publications/regions-in-industrial-transition-c76ec2a1-en.htm">http://www.oecd.org/publications/regions-in-industrial-transition-c76ec2a1-en.htm</a>
- Industry 2030 High Level Industrial Roundtable report "A vision for the European Industry until 2030" https://ec.europa.eu/docsroom/documents/36468
- 8) Report on **High-Tech Skills**: Scaling up best practices and re-focusing funding programmes and incentives <a href="http://skills4industry.eu/sites/default/files/2019-11/EA-01-19-571-EN-N\_incl-exec-sum.pdf">http://skills4industry.eu/sites/default/files/2019-10/EA-01-19-639-EN-N.pdf</a>
- 9) Increasing EU's talent pool and promoting the highest quality standards in support of **digital transformation** <a href="https://skills4industry.eu/sites/default/files/2019-06/Brochure\_Digiframe\_final20190617.pdf">https://skills4industry.eu/sites/default/files/2019-06/Brochure\_Digiframe\_final20190617.pdf</a>
- 10)Skills for Industry Skills for **Smart Industrial Specialisation** and **Digital Transformation**<a href="http://skills4industry.eu/sites/default/files/2019-11/EA0419517ENN">http://skills4industry.eu/sites/default/files/2019-11/EA0419517ENN</a> Skills for Smart Industrial Specialisation and Digital Transformation Brochure.pdf
- 12) Skills for Industry Curriculum Guidelines 4.0 https://op.europa.eu/en/publication-detail/-/publication/845051d4-4ed8-11ea-aece-01aa75ed71a1
- 13) Skills for SMEs: **Big Data, Internet of Things and Cybersecurity** <a href="https://op.europa.eu/en/publication-detail/-/publication/82aa7f66-67fd-11ea-b735-01aa75ed71a1/language-en/">https://op.europa.eu/en/publication-detail/-/publication/82aa7f66-67fd-11ea-b735-01aa75ed71a1/language-en/</a>
- 14) Article in the **CECIMO Magazine** on Platforms of Centres of Vocational Excellence <a href="https://www.cecimo.eu/newsroom/magazine/">https://www.cecimo.eu/newsroom/magazine/</a>
- **15)The Erasmus+ call for pilot projects on CoVE's**, published on 15 October 2019 https://eacea.ec.europa.eu/erasmus-plus/funding/ka3-centers-of-vocational-excellence\_en

