

Transforming institutions

to become TVET innovation hubs in a time of disruption

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João Santos, Deputy Head of Unit, DG for Employment, Social Affairs, and Inclusion, European Commission

Time allocation

13.35-13.45 Introduction to the workshop and overview of the UNESCO-UNEVOC Innovation Hubs Project *K. Barrientos*

13.45-14.00 The European Initiative on "Platforms of Centres of Vocational Excellence"

Joao Santos, European Commission

14.00-14.15 **TVET Innovation case** *M. Leunda, TKNIKA Basque region*

14.15 – 14.35 **Interactive discussion**



Guidance

- Three inputs about Innovation in VET initiatives
- 10-15 minutes presentation
- Q&A at the end
- Audience participation is welcome. Please post your thoughts.
 - What does 'Innovation in TVET' mean for you?
 - How can innovation lead to improving TVET image, processes and outcomes?







Project Framework

Presented on behalf of the Project Team

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https://unevoc.unesco.org/

Presented @ the WorldSkills Conference Amsterdam, The Netherlands 16 October 2018

UNESCO-UNEVOC Innovation Hubs





Theory of change

Where we are

Disruptions in work and society

Low capacities for innovation

 Need for enabling frameworks for bottom-up measures







Theory of change

What impact do we want to achieve?

TVET acts as a driver of Innovation in a coordinated eco-system

- Increased no. of youth with access to quality TVET
- Increased no. of youth employed in digital, innovative, entrepreneurial and green jobs

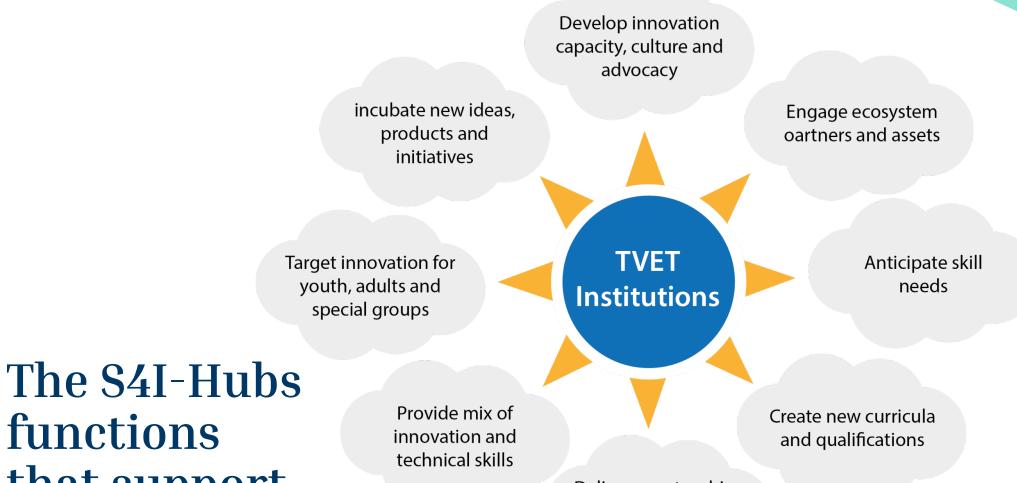
TVET institutions are empowered to develop a culture of innovation, fuel innovation process

Increased no. of youth with relevant transferable/innovation and technical skills for employment, decent jobs and entrepreneurship











Deliver new teaching and training processes





UNEVOC Skills for Innovation Project

Long term objective (2018-2023)

maximise the innovation potential of TVET schools to drive employability, economic growth and inclusive social development.

Objective (2018-2020):

- 1. An <u>innovation framework</u> for TVET schools is co-developed and tested with:
 - Innovation embedded in systematic institution-wide culture, capacity and communication;
 - Active engagement of school with the local innovation eco-system;
 - Innovative training and learning processes and products.
- 2. <u>Innovation capacity</u> is developed and documented through tangible innovation actions;
- 3. <u>Global TVET innovation platform</u> to share learning materials and innovation practices is launched;
- 4. TVET Innovation framework is applied in subsequent support programmes





A systematic project approach

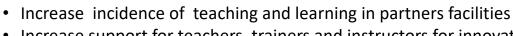
Innovation vision, plan and advocacy

- · Institutional vision, action plan documenting for innovation in the school
- Targeted capacity development leaders and staff
- Monitoring performance- changing skills needs/shortages and tracing graduates
- Innovating the Campus and Culture
- Institutional advocacy strategy/campaign to increase awareness of school as innovator (ie open school, champions, skill competitions)

Innovative engagement with eco-system

- Shared partnership strategy/action plan for innovation skills in eco-system
- Active/open engagement of industry, community, education, territorial, research in school cycle (ie governance)
- Engagement of EDG sectors according to local context/priorities

Innovative Processes



- Increase support for teachers, trainers and instructors for innovative products and services
- Increase incidence of innovative pedagogies (ie OER; Incubators)
- Documented innovation processes



Innovative Products



- Integration of innovation skills in curricula/qualifications
- New curricula/qualifications (in EDG) according to local context
- Increase in adult learning provision for innovation skills
- Innovative tangible products (ie ideas/projects; start ups; designs)



Projected Outputs





S4I Conceptual frame











Platforms of Centres of Vocational Excellence

World Skills Conference Building networks for innovative skills solutions Amsterdam, The Netherlands, 16 October 2018

Joao SANTOS

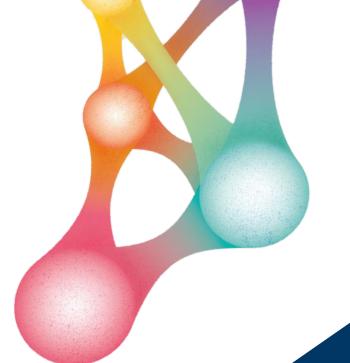
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Centres of Vocational Excellence Fostering "Skills ecosystems" ****

European
Commission

High
"Skill ecosystem"
flourishes

Companies
See comparative
advantage to address
skill development and
business performance
for generating
innovation and growth

Bringing together:

- Policy makers,
- Companies,
- Chambers
- Employment services/agencies
- Regional development agencies
- VET institutions (at all levels)
- Universities of applied science,
- Research centres

Vocational Education and
Training
Responsive delivery at all levels,
that is valued by individuals and
employers

Policy setting
VET, employment and
economic development
policies support high skills
strategy

Individuals
Invest in skills because
of rewarding jobs
and career
opportunities



Centres of Vocational Excellence Active in "Knowledge triangle"



Went knowledge improves the last inches the last input for ent year through and learning and development yes early and development yes early and development yes early and development.

Research and Development

VET promoting
Entrepreneurial attitudes and
STEAM skills

Source of innovation

Vocational Education and training (including HE)

VET skills as a key input for Business innovation and competitiveness

Knowledge of market needs push for relevant VET curricula and qualifications

Business/Industry



What is Vocational Excellence? Pro-active partner in local development









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



Quality assurance feedback loop, learner tracking

Cost-sharing and sustainable funding





Validation and Guidance

Providing both Initial and continuing VET at all EQF Levels



Vocational Excellence



Incubators supporting job-creation, and startups



SMART SPECIALISATION PLATFORM

Technology diffusion

Regional development,

Smart Specialisation, Knowledge triangle



Innovation HUB



Project based learning





What are Platforms of Centres of Vocational Excellence

Initiative to support VET: Excellence, innovation, and attractiveness

Trans-national Platforms, with a common interest in:

- Sectoral approach
 (e.g. Automotive, Hospitality, Social care, Aerospace, etc.)
- Thematic societal challenges (e.g. upskilling the low skilled, migrants, Digital skills, etc.)

The aim is <u>not to build new VET centres</u> from scratch, but to connect existing VET providers, their networks, chambers, companies, etc.

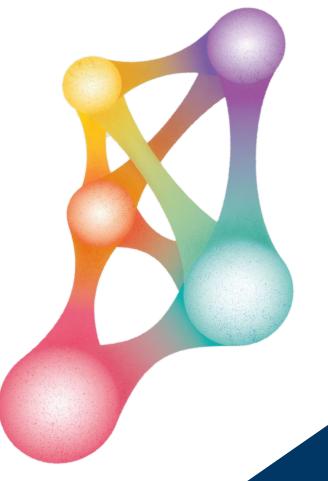




Platforms of Vocational Excellence On what will they cooperate?

Platforms connecting existing training providers, their networks, chambers

- Anticipating future skill needs (including Digitalisation)
- Developing Joint VET curricula
- Internationalisation strategies for **mobility** of: learners, teachers, trainers, VET leaders
- Innovative teaching and training methods (Digitalisation)
- Sharing of resources and equipment
- Active in trans-national "Knowledge triangle"
- Trans-national applied research projects
- Project based learning





European Vocational Skills Week 2018

Coming soon: the 2018 Week at https://ec.europa.eu/social/vocational-skills-week/

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THE WEEK 2018

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WS Conference_Mikel Leunda



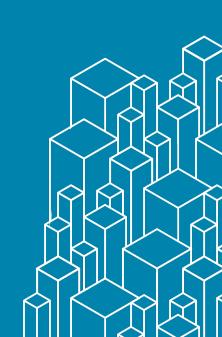
TRANSFORMING VET INSTITUTIONS TO BECAME TVET INNOVATION HUBS IN A TIME OF DISRUPTION



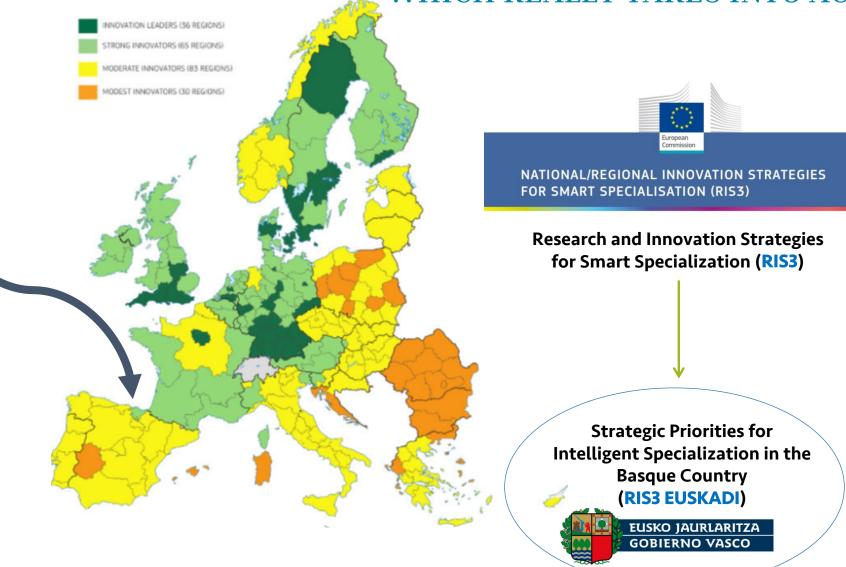
The case of Basque Country

16 October 2018 Amsterdam, The Netherlands

WorldSkills Conference
Uniting for Youth: Building Networks for
Innovative Skills Solutions



BASQUE COUNTRY: A HIGHLY INDUSTRIALISED REGION IN EUROPE WHICH REALLY TAKES INTO ACCOUNT THE VET SYSTEM





Vice Ministry for Vocational Education and Training







TKNIKA: BASQUE CENTRE OF RESEARCH AND APPLIED INNOVATION IN VET

- Focused on VET teachers
- WE work for the whole VET system in the Basque Country (public & private centres)

Companies

Projects Managers

Directors of the Areas

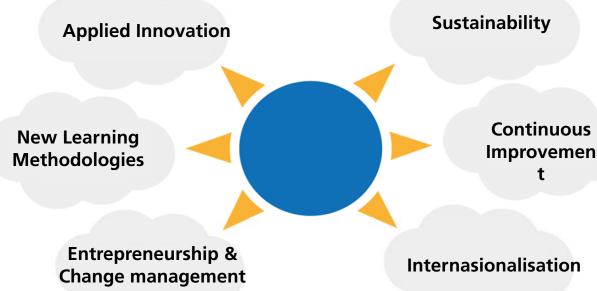
Management team

Project Teams

Management team (4) / Directors of the Areas (6) / Project Managers (36) / Collaborators (207 FTE)

• 253 people working on **Innovation**

Innovation in a wide sense (6 areas)





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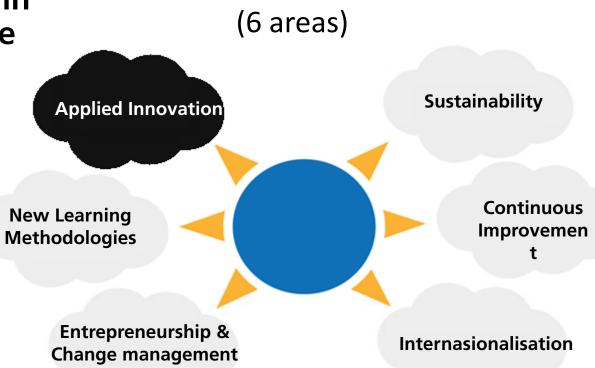
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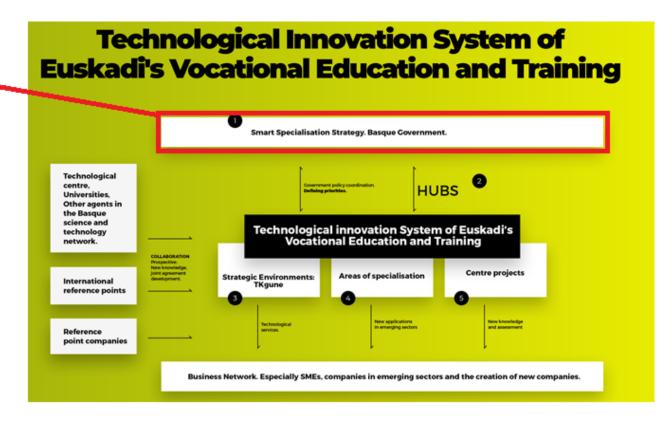


Innovation in a wide sense



 In line with the government policies and with the support of the 4th Basque VET plan (5th forthcoming) and the Basque VET Law

 In close collaboration with agents of the Basque Network of Science, Technology and Innovation



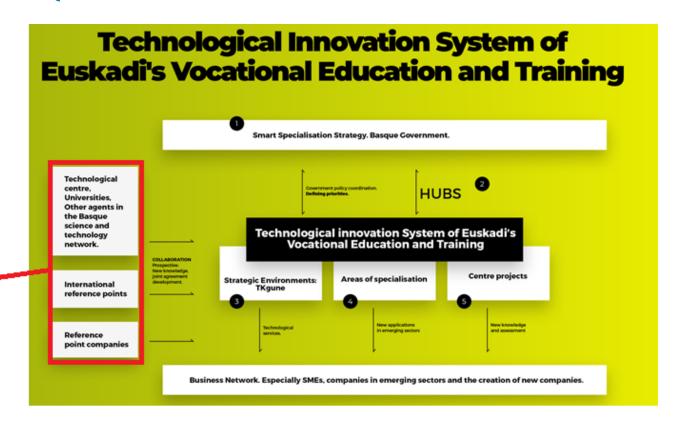
 In close collaboration with companies (mainly SMEs)





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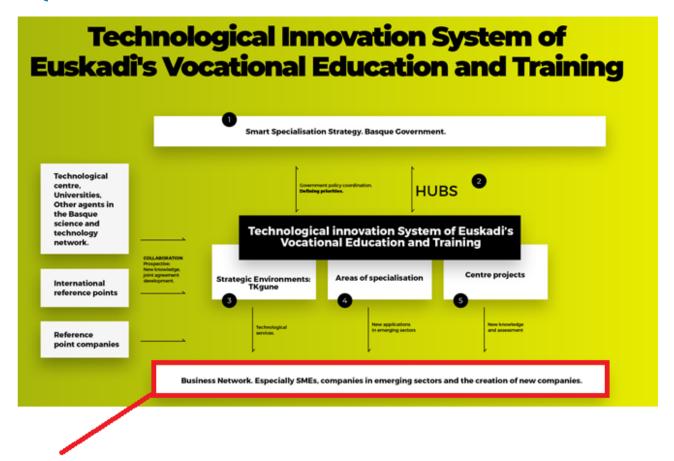
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HUBS

The purpose is to anticipate the needs of the labor market in those areas considered as strategic ones by the Basque Government.

For that VET teachers are in contact with leading companies to identify medium term needs and define a response from the VET system.

Advanced Manufacturing
Digital and connected factory
Energy
Bioscience and biotechnology



STRATEGIC ENVIRONMENTS (Tkgune)

In the Areas where VET centres already have accumulated expertise technological services are offered to SMEs and companies pay for it.

By doing that we get a mutual benefit: addressing the innovation needs of basque SMEs and updating the knowledge of VET teachers and curricula.

Manufacturing
Automation
Energy
Automotive
Creative Industries



SPECIALISATION AREAS

The aim is to capacitate VET teachers in those rising areas, in order to deepen their knowledge and transfer it to the whole VET system.

The definition of this Areas is defined by the Viceministry and tries to be as flexible as possible, in order to adapt to disruptive changes. Virtual Settings
Composite materials
Drone applications
Internet of Machines
4.0 Factory
3D printers
Metal Additive Manufacturing
Automotive technologies
Industrial Cybersecurity



CENTRE PROJECTS

The aim is to capacitate VET teachers in those areas that VET centres consider as crucial, attending to the needs of their environment. An open call is made and the received proposals are analysed; some of them being approved by the Viceministry (43/169)

The VET teachers have some partial/total commitment to develop the innovation projects, with the compromise of transferring the acquired knowledge to the whole VET system.

 WE try to anticipate the needs of the labor market and adapt our offer in accordance.

HUBS

STRATEGIC ENVIRONMENTS (Tkgune) WE address the innovation needs of Basque SMEs, adapting VET institutions to address their needs by offering technological services

 WE work to capacitate our VET teachers, to be able to react in a flexible manner to the oncoming changes. AREAS OF SPECIALISATION

CENTRE PROJECTS

Main challenge: to reduce the time until innovations arrive to the society to be able to face oncoming changes





Eskerrik asko! Thank you!

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WorldSkills Conference 2018 Amsterdam

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