



TKNIKA

Chain5 Strategy in the Basque Country

Bled (Slovenia)







CHANGES AND TRANSFORMATIONS 4th Industrial revolution

1st Steam machine

2nd Chain Production

3rd Process Automation

4th Digitalization. Smart factories

Industrie 40 -

<u>The Fourth Industrial Revolution(bajaryoutube.com).avi</u>







CHANGES AND TRANSFORMATIONS TODAY

- Unemployment and middle class becoming smaller and smaller
- Globalization or Protectionism:
 - Global trade competition and global regulatory standards:
 Changes in organization, production and marketing systems.

OR

- Restricting imports. Reduction of standard living
- Migrations: Mobile populations
- Aging Population







MORE CHANGES AND TRANSFORMATIONS, JUST ROUND THE CORNER

- The idea of human being some sort of natural concept, is really going to change. Does Human continue being a human resource?
- Will we be able to really distinguish what is natural and what is artificial?
- Can we get to be super-humans?
- The fourth revolution will not change what we are doing, it will change us and our living style
- We need a new economical model that will allow us to meet the basic needs of every human on the planet
- The key goal will not be based on growth but on maximizing human well being







MORE CHANGES AND TRANSFORMATIONS, JUST ROUND THE CORNER

- Empower people all over the world to create a more equitable growth
- The fourth industrial revolution has the potential to make inequalities visible and to make less acceptable in the future
- The change will also be determined by the role the feminism will play in the society. It is a must the incorporation of women with equal opportunities to the industrial revolution
- We have to adapt ourselves and what we are doing to these technological changes and challenges







CHANGES VS CHALLENGES THE WORLD IS OPEN TO LEARNING





TIME TO CHANGE ALSO HERE



LANBIDE HEZIKETA



CENTRO CENTRE

CHANGES VS CHALLENGES THE WORLD IS OPEN TO LEARNING

NEW WORLD NEW EDUCATION NEW TRAINING













NEW TRAINING NEW SKILLS

- Submit Proposals
- Define objectives
- Assess Priorities
- Produce alternatives

WITH

- Informative visión
- Intuitive visión
- Constructive visión
- Creative Vision
- Organizational vision







NEW CAPABILITIES

MANAGEMENT CAPABILITY

INTERPRETATION CAPABILITY

ANTICIPATION CAPABILITY

DECISSION CAPABILITY







WE NEED A NEW SMART VET5

VALUE VET5:

Values-based Learning

OPEN VET5: Responsibility for VET not only on the centres but on companies, society, collaborators, students. New environments.

SMART VET5: TICs to improve training: VET classroom, eVET portfolios. Personal Learning Environments. Personal teaching environments. Smart VET Centres. Advanced management. Smart Leadership

SKILLFUL VET5:

Competences-based learning and Assessment

INNOVET5: New technologies

REG-VET5: Training focused on regional needs. Market Positioning . Alliances Management Process

INTER-VET5: Training in different languages, membership in networks, management of international projects. Mobility of teachers and students







SMART VET5

 VET5 centres should be perceived not because of what they do but because of what they know and what they are able to do







WHAT WE NEED. ADVANCED MANAGEMENT

- Strategic focus
- ✓ Adapting to and anticipate to changes
- ✓ Fact based decisión making process

- Operational focus
- ✓ The right information to the right people
- ✓ Positioning
- ✓ Training, innovation and improvement







WHAT WE NEED. ADVANCED MANAGEMENT

Aptitude

Knowledge Skills Experience





Attitude

Willingness Encouragement Engagement



HEZKUNTZA, HIZKUNTZA POLITIKA ETA KULTURA SAILA Lanbide Heziketako Sailburuordetza

EUSKO JAURLARITZA

DEPARTAMENTO DE EDUCACIÓN, POLÍTICA LINGÜÍSTICA Y CULTURA Viceconsejería de Formación Profesional Learn to be

People

Values





VET5 COLLEGES

TRANSVERSAL ORGANIZATIONS

REACTION AND ADAPTATION CAPACITY

FORESIGHT

HUMAN BEING

Qualification Ethics

Values

Knowledge

TECHNOLOGY

Design Develpment

Production

Value Creation

INNOVATION

Competitive innovation

Technological Intensity

Knowledge





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People who learn: A new paradigma vor VET5

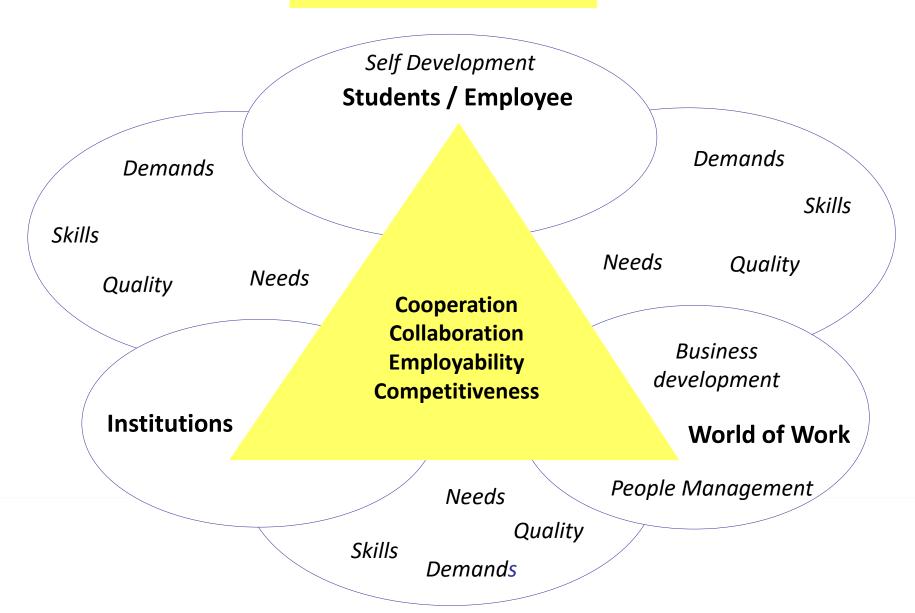
- To train entrepreneurs not only employees (Entrepreneurial culture)
- To train, educate and guide (technical and transversal competences.
- To train to create, to learn to learn.
- To train on competence (open practices) not on incompetence (avoid exclusion) Scafolding learning.
- Evaluate for learning, to integrate not to classify and expel from the education system.
- Integrate (Level 1, 2 3) and innovate (Level 5, specialization courses)
- To offer trilingual training.
- NODE of training for students, workers, unemployed. Technological reference node for the SME.







The Strategic Triangle





Combined Framework of Training, Innovation and Entrepreneuship

Change Management, Reaction Capacity, Anticipation Capacity



Applied Innovation System





- Integrated centres network
- Spezialization courses and dual sistem
- Services to the companies: Tkgune
- High Performance Training model:Fthazi
- Fostering entrepreneurial culture
- Colleges as incubators

VET

 International
 Basque
 Campus:

Vetibac















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Tknika:

- Reflects on innovations and their applications
- Helps VET centers to renew their educational proposals, their offer, their methodologies
- Responds more satisfactorily:
 - To the challenges of the times and
 - To the expectations of companies and students.







Tknika is a center promoted by the Viceministry of VET, Department of Education of the Basque Government.

Collaborates in **network** with the public and private VET centers.

Its purpose is to move forward in new learning environments and processes and to enable new technologies to reach VET centers and companies quickly.



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Tknika is successful because:

- Anticipates changes and updates the triangle
- Provide VET centers with proposals, experiences,
- And helps them to become flexible organizations







Tknika, a Learning Organization

- Motor of changes and transformations.
 - An agent which generates innovation.
 - Someone who makes things happen.







Tknika, a Learning Organization

Innovation Model:

TknikaInnova

Technological Innovation of the VET System

Ethazi Model

Phases of a chalenge

Internationalization

Integral approach to Entrepreneurship Quality Management System









TKNIKAINNOVA model

Key processes

FOLLOWING UP

CAPTURE, ANALYSIS, **SELECTION AND DEVELOPMENT OF IDEAS AND** PROJECTS.

PROJECT MANAGEMENT

TRANSFERENCE

Staff Training

Planning

Internal Communication

Economical Management *Improvement*

System Checking

Maintenance

Document management

Internal Audits

Support processes



Culture of Innovation

Purchasing

A Routine which changes Routines

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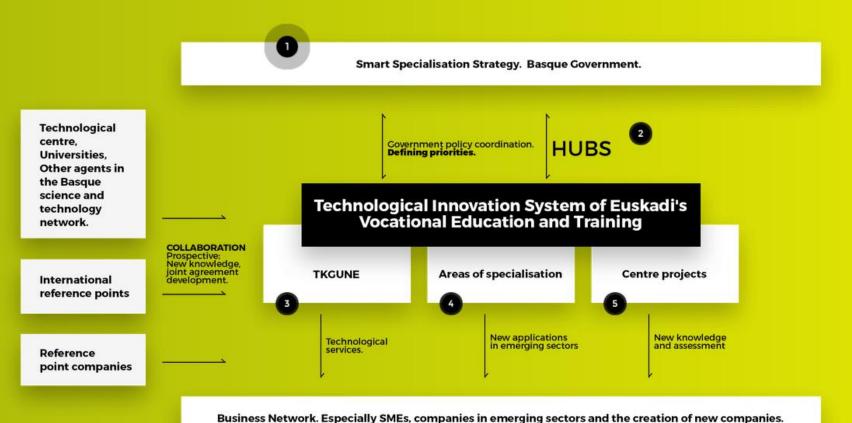
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Technological Innovation System of Euskadi's Vocational Education and Training





Ongoing Innovation projects

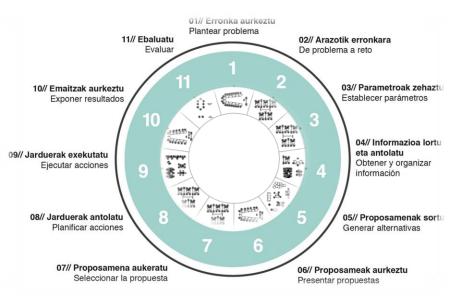
- Automating for Industry 4.0
- OffShore
- Hospital Care
- Biotknifish
- Virtual Settings and Augmented reality
- Additive Manufacturing
- Ikaslab. 3D Printing Applications
- Drone Applications
- Internet of Things
- Composites
- Woodnika
- Automobile Technologies







Ethazi Challenges



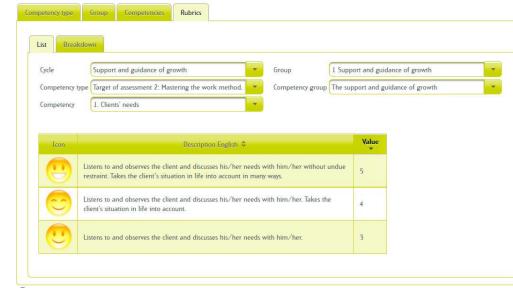
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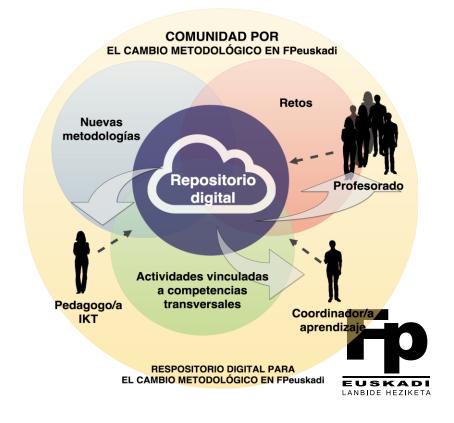
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Internacionalización



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1st Stage

"COMPETITION: GOOD PRACTICES AT VET CENTRES"



3rd Stage

PRESENTING BEST PRACTICES

Whitehall I.

Best Practices in Education

Warkshop 2. Good Practices in other sectors

Time: 3h

Time 2h

5th Stage

WORKSHOP ON ENTREPRENEURAL VET IN BASQUE COUNTRY

> Programmes and Initiatives Sesign a good practice in the VET Centre

















TARGET GROUPS:



innovative teachers



Technical teachers no yet into ontregroneurship

2nd Stage

WORKSHOP ON DEFINING. DESIGNING ENTREPRENEURIAL TEACHERS.



Time 6 h

4th Stage

WORKSHOP ON MANAGEMENT AND INNOVATION

Expendence and Business basic potions Design a good practice in the NET Centre-



6th Stage

FINAL WORKSHOP GoP Entrepressurial Teacher

To present the good practice in the VET centre.



Time: 5 h



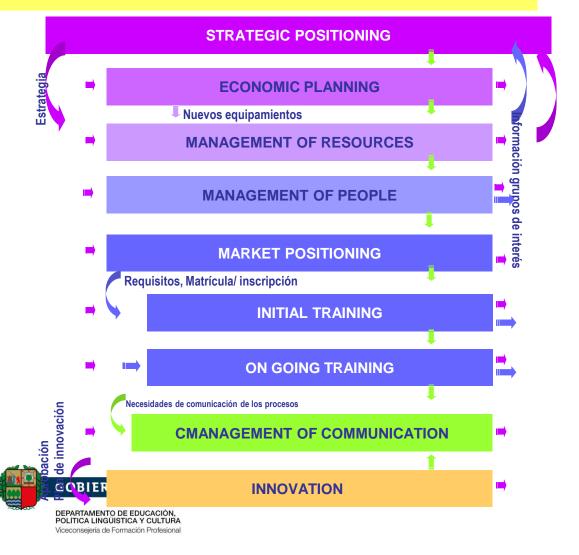








QUALITY MANAGEMENT SYSTEM





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FRAMEWORK OF EXCELENCE IN THE BASQUE VET SYSTEM























International Networks

European Forum of inical and Vocational lucation and Training	Annual meeting in October 2017 in Thesalonikki (Greece).
Trans-Atlantic Technology and Training Alliance	European Committee members Annual meeting in June 2017 in the Netherlands.
	Members of the borad
World Federation of Colleges and Polytechnics	Leadership in the Forum of Applied research in advanced manufacturing Bienal in October 2016 in Brasil.

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International Networks



Member of UNESCO UNEVOC since 8th March 2017







Area of Internationalization

- European Projects
 - Terciary Education, Leadership, Entrepreneurship and Business/Training relation Digital competencies, Industry 4.0, STEAM
- Collaboration with third countries
- Technological awareness in Europe.
 Annually Mobility programmes for 256
 VET Teachers and 867 students.
- International Networking
 - TA3 EFVET WFCP
- Training for Basque Companies`employees
- VETIBAC (Vocational Education and Training International Basque Campus)









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Eskerrik asko!

Thank you!

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