CHICAGO APRIL 2019

"Winds of change are blowing"





"We are going to live in a constantly changing environment"



"Welfare and Social Cohesion"



"Need to deepen new approaches"

"About the needs of people"

Progress



Human Development Economic Development

Sustainable Growth

Quality of Life

Welfare



Economic growth

Progress

Competitiveness

Social Cohesion

Productivity

Competitiveness

Social welfare

Social welfare



"Towards a new outlook on competitiveness"



"To address the competitiveness from the perspective of people"



" Competitiveness not to be an end in itself"

"But a capacity at the service of welfare"

COMPETITIVENESS



From a perspective of productivity

To a perspective based on the human dimension

Education, health, social cohesion, sustainability and innovation capacity



"Sustainable Human Development"



"Progress is not to improve what it is, but to move towards what it is going to be"



The Human Factor



A smart systems world

Quick technological evolution

Advanced skills



The importance of talent

The concept of employability



The employability is evolving towards a professionalism much more complex





Professional success will depend on the profile of the person and its capacity to adapt at any time





2020

APPLIED INNOVATION

PERSONAL AND PROFESSIONAL ENTREPRENEURSHIP

Internationalization



Cultural, scientific and technological component

Professional component

High qualification and specialization

Values 4.0

Values 4.0



Emotion

Feelings

Commitment

Intuition

Imagination

Capacity of Improvisation

5th Basque VET Plan

SMART VOCATIONAL EDUCATION

> EUSKADI LANBIDE HEZIKETA

> > 2023

SUSTAINABLE VOCATIONAL EDUCATION

SOLIDARITY VOCATIONAL EDUCATION

INTEGRATING VOCATIONAL EDUCATION



"SMART VOCATIONAL TRAINING"



SMART VOCATIONAL EDUCATION

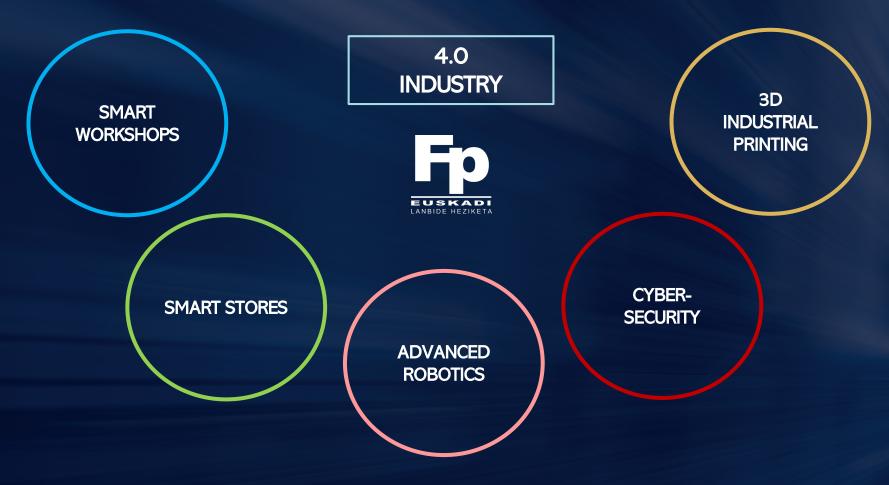


SMART SYSTEMS

DIGITALISATION CONNECTIVITY

NEW ORGANIZATION

HIGH PERFORMANCETRA INING



BIO INFORMATICS BIGDATA 4.0 HEALTH

EUSKADI LANBIDE HEZIKETA DIGITAL HEALTH 4.0 DEVICES

SMART HEALTH STORES

BIO FOOD TECHNOLOGY BIO PRINTING COMPATIBLE MATERIALS DIGITISED PERSONAL PICTURE 4.0 SERVICES

EUSKADI LANBIDE HEZIKETA

MICRO SMART IRRIGATION

PRECISION
AGRICULTURE
FARMING

SMART SPACES

REMOTE
SENDING
VIA
SATELLITE
&
DRONES

SMART HOUSES SMART SYSTEMS

EUSKADI LANBIDE HEZIKETA ADVANCED SENSOR SYSTEM

AUTONOMOUS VEHICLES

MIXED & VIRTUAL REALITY

INTERNET
OF
THINGS
(loT)



ENVIRONMENTS 4.0



4.0 SERVICES

4.0 HEALTH HIGH PERFORMANCE TRAINING

METHODOLOGIES LEARNING AND SPACES



WORK-LINKED DUAL VET

SPECIALIZATION PROGRAMS

INFORMATION "ST" FIELDS

"STEAM" INITIATIVES & ACTIONS



PROJECTS
IMPLEMENTATION
"STEAM" FIELDS

ANALYSIS

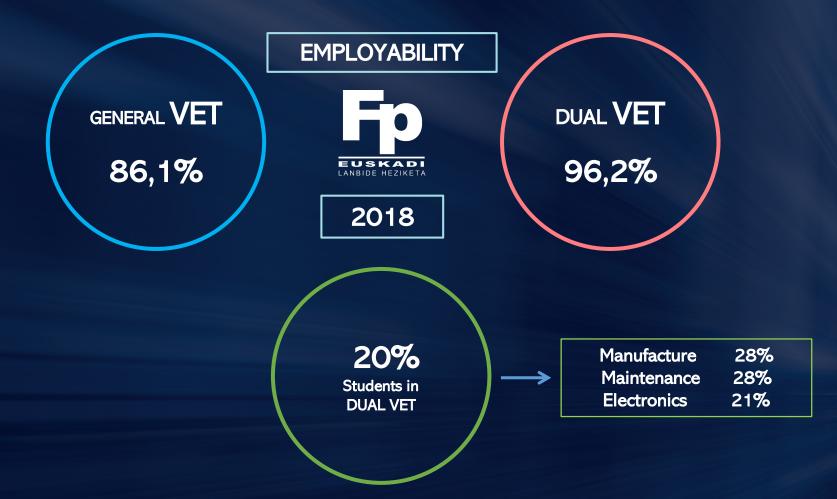
"STE" FIELDS

CREATIVITY & 4.0 VALUES

"A" FIELD

PROTOTYPE

"STEM" FIELDS



52 VET **CENTRES**

HIGH PERFORMANCE TRAINING

2018

279
TRAINING CYICLES

1953 TEACHERS TRAINING

2.506
TEACHERS
TRAINED

6.975 STUDENTS





2.100 COMPANIES BY 2018 APPLIED INNOVATION WITH SMEs

2018

103 TEACHERS

35
CENTRES





+ 15.000

STUDENTS **ENTREPRENEURSHIP** CULTURE

2018

856

COMPANIES SET UP DURING THE LAST 12 YEARS

> 72% SUCCESS

256 **PLANS** 87 **COMPANIES SET UP**



Intelligent System in the Basque Vocational Training



Answers to new objectives

Uses new methods

Introduces new organizational models



The Innovation Factor

COMPETITIVE INNOVATION



TECHNOLOGY

KNOWLEDGE

COOPERATION



Incremental innovation

Disruptive innovation

Intuitive innovation

TO OBSERVE
DIFFERENT
ENVIORENMENTS

INTUITIVE INNOVATION

TO EVALUATE THE RESULTS



TO MONITOR ENVIRONMENTAL CHANGES

TO IMAGINE SOLUTIONS

TO DECIDE
THE BEST
OPTION

TO IMPLEMENT &
APPLY



The Intelligence Factor

ENVIRONMENTS 4.0 SMART VOCATIONAL TRAINING

NEW ORGANIZATION



DIGITALISATION CONNECTIVITY

SMART SYSTEMS

ARTIFICIAL INTELLIGENCE

HIGH PERFORMANCE TRAINING



The Technology Factor

TECHNOLOGY & SMART SYSTEMS



ADDITIVE
MANUFACTURING
ROBOTICS

ADDITIVE MANUFACTURING 3D PRINTING

VIRTUAL REALITY

INTERNET OF THINGS

NEW MATERIALS

COMPLEX METAL PIECES

INDUSTRY

AUGMENTED REALITY SMART HOUSES

CARBON FIBER

ARTIFICIAL VISION

HEALTH

MERGED REALITY

SMART SYSTEMS

COLLABORATIVE INDUSTRIAL ROBOTICS

GASTRONOMY

VIDEOGAMES

CONNECTIVITY

TEXTILE

WELFARE

TECHNOLOGY & SMART SYSTEMS



DRONES

SMART STORES 4.0 SMART WORKSHOPS 4.0

AIR

AUTOMATED WAREHOUSE

ADVANCED MANUFACTURING

SUBMARINE

AUTOMATED OPERATIONAL

INTEGRATED MANAGEMENT

THERMOGRAFY

CONNECTIVITY

CONNECTED WORKSHOP

PHOTOGRAMMETRY

DISTRIBUTION
CODIFICATION
REGISTRATION
THROUGH DIGITAL IMAGE

ROBOTICS

CYBER-SECURITY



The Sustainable Factor

BIOSCIENCES & SUSTAINABLE DEVELOPMENT



BIOECONOMY

SMART BUILDING

HEALTH

CIRCULAR ECONOMY

AGRO-ALIMENTARY

BIM

HEALTHY AGEING

PRODUCTION

NATURAL ENVIRONMENT

loT

ENVIRONMENTAL SUSTAINABILITY

PROCESSING

MARINE ENVIRONMENT SUSTAINABLE BUILDING

BIOSCIENCES

PRODUCTION CONSUMPTION

BIOMATERIALS

BIOTECHNOLOGY

REUTILIZATION



The Supportive Vocational Factor

Supportive Vocational

COMPETENCIAS 4.0



CATÁLOGO MODULAR

ITINERARIOS INTEGRADOS APRENDIZAJE UNIDADES Y
ELEMENTOS DE
COMPETENCIA





General Competence

Units of competence

Elements of competence

Learning outcomes



"VET Smart Centres 4.0"



Capacity to adapt

Capacity to react

Capacity to anticipate

Capacity to disrupt



STRATEGY

INNOVATION

VET Centres 4.0

OPERATION

COMPLEXITY MANAGEMENT



INFORMATION MANAGEMENT

KNOWLEDGE MANAGEMENT

INNOVATION MANAGEMENT

CHANGE MANAGEMENT CONFIDENCE MANAGEMENT

VET BIG DATA APPLIED INNOVATION

SMART ORGANIZATION

SHARED PROJECT

COMPETITIVE INTELLIGENCE

INNOVATION ROUTINES

CHANGE STRATEGISTS

SHARED SUCCESS

PROSPECTIVE

SHARED VIGILANCE CONTINUOUS IMPROVEMENT

EVALUATION UPON

RESULTS

STRATEGIC APPROACH

SATISFACTION

KNOWLEDGE ORGANIZATION

ASSURANCE

OPERATIVE APPROACH

MOTIVATION

ANTICIPATE

COLABORATIVE TEAMS

COMMITMENT

INNOVATION ROUTINES



COMPETITIVE INTELLIGENCE

65 VET CENTRES 3 NETWORKS

2.060 TEACHERS

52VET CENTRES

5 NETWORKS

1.816 TEACHERS

NEW RESPONSABILITIES



Drivers for advanced learnings

Drivers for connectivity and digitisation

Satisfaction managers

Smart systems experts

Change strategists

BigData Specialists

NEW TEAMS



STRATEGY

INNOVATION

PLANNING

INTELLIGENCE

GUIDANCE

LEARNING

SATISFACTION

MENTORING

NEW SPACES



IDEAS

MOTIVATION

HIGH PERFORMANCE

DEBATE

SMART

INTERACTIVE

VIRTUAL REALITY

IMMERSIVE

STEAM

TKNIKA



Areas

TECHNOLOGICAL INNOVATION &
SMART SYSTEMS

BIOSCIENCES

COMPLEXITY MANAGEMENT

ENTREPRENEURSHIP

APPLIED INNOVATION IN STRATEGIC FIELDS

BIOECONOMY & SUSTAINABILITY

BIG DATA &
TECHNOLOGY APPLIED TO
THE INFORMATION

INTERNATIONALIZATION

BASQUE INSTITUTE FOR FUTURE LEARNING



IDENTIFIES AND
ANALYSES
TRENDS
OBSERVATORY

ESTABLISHES
NEW PROFILES
OF FUTURE
LEARNINGS

DEVELOP ES A CURRICULUM ACCORDING TO FUTURE NEEDS

CREATES A BASE FOR CURRENT DECISION MAKING FOR THE FUTURE

NEW
FUTURE SKILLS
FOR CHANGE

ESTABLISHES
TRANING NEEDES

ESTABLISHES
PROCEDURES
UNDER FUTURE
PRIORITIES

OF EMERGING AND UNKNOWN SECTORS PUBLISHES
GUIDEBOOKS AND
MANUALS FOR
TEACHERS

BASQUE INSTITUTE FOR FUTURE LEARNING



Areas

RESEARCH ON FUTURE SKILLS, SPECIALIZATIONS AND HIGH QUALIFICATION

EMERGING VOCATIONAL PROFILE
AND MEANINGFUL LEARNING
MODELLING

TALENT
VERIFICATION AND ACREDITATION

BASQUE INSTITUTE OF TALENT



TALENT MAP LEARNING METHODOLOGY

CREATIVITY

THINKING &
INTELLIGENCE

WHAT DOES
IT INTEGRATE

COLABORATIVE LEARNING

VIDEOGAMES

CONSTRUCTIVE THINKING

COMPETENCE

LEARNING SPACES

ANIMATION 3D CREATIVE THINKING

TALENT

STEAM STRATEGY

ENTREPRENEURSHIP

GENERATING INTELLIGENCE

GENIUS

VALUES 4.0 CREATIVE INDUSTRY

EXECUTIVE INTELLIGENCE

BASQUE INSTITUTO OF TALENT



Areas

APPLIED RESEARCH ON LEARNING METHODOLOGIES

ADVENCED LEARNING IMPLEMENTATION

TRANSFER AND COLLABORATIVE NETWORKS

BASQUE INSTITUTE FOR FUTURE LEARNING



OBSERVATORY

SPECIALIZATION PROGRAMS

NEW
FUTURE SKILLS
FOR CHANGE

VOCATIONAL EDUCATION QUALIFICATIONS UPDATE

RECOGNITION OF TALENT FUTURE LEARNING DESIGN

BASQUE INSTITUTE OF TALENT



TALENT MAP

LEARNING SPACES

TEACHERS'
TRAINING

LEARNING METHODOLOGIES

CREATIVITY

THINKING &
INTELLIGENCE



TRANSFORMATIONS

1995 Mangement model

1997 I Basque Plan on VET

2004 Il Basque Plan on VET

2010 III Basque Plan on VET

2013 Strategic Agenda

2014 IV Basque Plan on VET

2018 Basque Law on VET

2019 V Basque Plan on VET