

# Vocational and Professional Education and Training Innovative Practices

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# (P)VET Innovation

## Examples of (P)VET innovative practice & trends in Europe and Ireland



*'Stronger innovation is imperative for Ireland to support future productivity growth, job creation and higher living standards. This requires comprehensive government action, extending beyond research and innovation to include business, entrepreneurship, skills and digital economy policies.'*

Source: OECD (2015) Ireland Policy Brief

# Education; towards the workplace

*‘While in the past, educationalists may have been wary that the narrow repetitive tasks of the workplace should not crowd out the broader agenda of education, now, the demands of the workplace are increasingly focussing on the very characteristics education nurtures – critical thinking, creativity, innovation, adaptability, collaboration. Learners gain experience from placement in real world settings, while organisations and enterprises (public and private) enhance their capacity to innovate and embrace new insights and technologies through interaction with education’.*

Source DES (2016, p43) Action Plan for Education 2016-2020

# Education; training for work

*'...European Trade Union Confederation (ETUC) reaffirmed its demand for a New Path for Europe with an investment programme of 2% of GDP per year for the next 10 years, to generate around 11 million quality jobs. 'Work-based and workplace learning should be top priorities for European countries, in order to facilitate the transfer of young people between education and training and the labour market, and to ensure that workers have access to continuing training so as to retain their jobs and improve their skills and careers'.*

Source: ETUC (2016) European Quality Framework for Apprenticeship.

# Education; learning skills to work

*Technical skills plus social/project competence are crucial for the new talent profile since innovation increasingly comes from collaboration. As the world we live in is so unpredictable, young people must be empowered by 'learning how to learn', along with creativity, problem solving and communication skills. Curricula must consist of experiential and project based approaches, including work-based training opportunities, such as apprenticeship systems.*

Source: Global Competitive Talent Index 2017

# VET and the new world of work

Technological innovations are changing the nature, methods and processes of work; artificial intelligence, robotics, big data, cloud computing, internet of things, 3D-printing, platform businesses, nanotechnology, composite materials, green technologies and so forth.

The new world of work is; changing fast, innovation cycles are shortening, implementation of new products, methods and processes is ongoing, innovative change is transcending traditional borders and social structures.

It is difficult to forecast the new skills needs due to the rapid speed of change.

New jobs will require combinations of skills; digital, technical, transversal, communications, socio-cultural and behavioural.

VET providers will need to explore new pedagogies and praxis to facilitate the learning and skills needs of the new world of work.

Source: CEDFOP (2017) Briefing Note: People, Machines, Robots and Skills.

# Innovative practices in VET

Some practical examples of innovative VET from Europe and Ireland

<b>Quality and standards to support Mobility</b>	
<b>Applied research for VET teachers</b>	
<b>Stakeholder cooperation for RPL of VET</b>	
<b>Sectoral alliance for apprenticeship</b>	
<b>Developing new apprenticeships</b>	
<b>Worker organised upskilling</b>	

# NETINVET Quality & standards for mobility



*'...promotes recognised mobility in Europe for learners in vocational training programmes in the sectors of International Trade and Transport & Logistics by establishing mutual trust between the members and developing various tools to facilitate organisation of the mobility'. (<https://www.netinvet.eu/en/>)*

European network for VET professionals (schools, associations and employers) focused on creating quality mobility experiences and knowledge sharing relating to international trade and transport & logistics. Currently there are 75 schools in the network from 11 European countries.

- The network enables teachers, trainers, employers and associations to share best practice and insights and explore the changing nature of the working environment.
- The network focuses on international trade and transport & logistics at EQF levels 4-5.
- The network assists VET teachers to engage with employer's and associations to maintain an up-to-date understanding of the relevant needs of the industry.
- The knowledge gained is shared by teachers in their school. Learners are encouraged to engaged in mobility opportunities created by the network. This initiative is supported with funds from the EU Erasmus + and contributions made by employers.

# Tknika applied research for VET



*'To make research and applied innovation core fundamental elements of Vocational Education and Training in Euskadi, to make progress in new learning settings and processes, and to reduce the skill gap from when an idea or technology comes about until society can take advantage of it'.*

Tknika Mission Statement (<https://www.tknika.eus/en/>).

Located in the Basque region of Spain, Tknika is an applied research and innovation centre for VET.

- Its purpose is to provide VET teachers with modern research facilities and expertise to support engagement with business and industry for problem solving and to develop innovations.
- VET teachers may participate in applied research activities in the centre on the understanding that they share all outcomes and innovations with their VET school and schools in the region.
- Tknika also engages in advanced training in pedagogy for VET teachers. The centre facilitates participation of VET teachers by means of time allocations and resources.
- The centre is public funded and is directed to serve the needs of VET teachers, industry and people in the region.

# OPTIMAL: stakeholder cooperation for RPL

OPTIMAL is an EU Erasmus+ funded project. The project consists of a VET school, university, private company and social partner.

The project enables VET teachers to engage with higher education and industry to develop a common understanding of industry methods and processes with a view to identifying standards in the aquaculture sector.

- The aim is to develop an ICT tool to assist in the recognition of prior learning (RPL) of VET skills.
- The RPL tool will be supported by a rapid response system based on mobile technology. This will include the development of pedagogical practice to support the utilisation of the RPL tool in a training and education setting.
- The project encourages mutual sharing of knowledge and experience between VET teachers, training experts and the aquaculture industry to create practical solutions for training and assessment at VET level.

# European Sectoral Alliance

‘Over half a million training and job opportunities for young people have been mobilised since the launch of the EAfA in 2013’

Marianne Thyssen, European Commissioner for Employment

The European Alliance for Apprenticeship (EAfA) aims to bring closer cooperation between employers, social partner, education and training providers and learners with a view to advancing apprenticeship opportunities across Europe.

The EAfA seeks to:

- increase the supply of apprenticeship opportunities,
- enhance the quality of apprenticeship education and training,
- promote a positive image of apprenticeship and
- encourage greater mobility of apprentices across Europe.

The EAfA recognise the importance of work based learning as a route to good quality employment opportunities.

# Generation Apprenticeship

In Ireland Generation Apprenticeship is a new initiative to promote the status and attractiveness of apprenticeship as a career path for youths and adults. Providing apprenticeship opportunities in a diverse range of work areas and at different levels. The initiative endeavours to develop work relevant skills for the 21<sup>st</sup> century.

## Characteristics:

- Industry-led partnership with education and training
- Award from Level 5 to 10 on the National Framework of Qualifications (NFQ)
- Between 2-4 years in duration
- Minimum 50% on-the-job learning
- Flexible delivery – online, blended, off-the-job learning in increments/blocks
- Apprentices are employed under a formal contract of apprenticeship
- The employer pays the apprentice for the duration of the apprenticeship

Source; [apprenticeship.ie](http://apprenticeship.ie)

# ÉTOS: Workers organising workplace learning

In Ireland the Technical Engineering and Electrical Union (TEEU) provides representation and advice to apprentices and skilled workers employed in the engineering and power related industries.

In recognition of the changing nature of work practices and regulations within the industry and with a view to providing upskilling opportunities for members, the union has established a training company Education, Training and Organisational Services (ÉTOS).

- ÉTOS in consultation with employer(s) develops and delivers both general and site-specific workplace training programmes. The purpose is to keep its members work skills up-to-date and relevant to the modern demands of the workplace. The training can be delivered in the union premises, the workplace or a hired training facility. The training can be certified by either the QQI, professional body or the employer.
- ÉTOS provides training in essential work related areas (Electrical, Hydraulics, Pneumatics, Production Line, Logic Controllers, Maintenance) and soft skills (Communications, Supervisory, Teamworking, Trade Union Representation).
- ÉTOS also offers health and safety at work training courses.

# Enhance innovation in VET

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Measures needed to enhance innovation in VET:

- Policy framework supporting (VET) innovation
- Resource allocation model to facilitate stakeholder engagement
- Infrastructure and equipment to allow exploration of ideas
- Formal linkages between education and workplaces
- Formation of professional VET networks
- Development of multi-discipline (VET) knowledge repositories
- Technology supporting knowledge sharing & problem solving

# Future trends in VET

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Blurring of the boundaries between education and training:

- Professionalisation of VET (teacher, trainer, expert)
- VET embedded in all levels of education (EQF levels 1-8)
- Expansion and diversity of VET provision (public and private)
- Recognition of VET Learning (formal, informal, non-formal)
- VET and work active engagement (curriculum development)
- VET; in work, for work, by work (multiple learning locations)
- Mobility of skilled labour (VET qualifications passport for work)

# Last word

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*‘In a smart working world, vocational education and training is a smart choice. The perception that VET is the "poor neighbour" of a university education is mistaken. It is not a poor neighbour, it's an equal’!*

Marianne Thyssen, European Union Commissioner for Employment, Social Affairs, Skills and Labour Mobility, 20<sup>th</sup> November 2017.

# Thank you for your attention

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A special thank you to the Learning & Teaching Expo conference organisers, for their kind invitation to attend this event and for creating a space to facilitate networking and knowledge sharing opportunities.

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Note: The views expressed in this presentation are those of the author. All data sources used are acknowledged.