

# skillset AND MATCH

CEDEFOP'S MAGAZINE  
PROMOTING  
LEARNING FOR WORK



 CEDEFOP

ISSUE 23 / SEPTEMBER 2021

**FEATURE:**

EU HEALTH: INVESTMENT  
NEEDED FOR GROWING  
ELDERLY POPULATION

**INTERVIEWS:**

STELLA KYRIAKIDES  
JOÃO COSTA  
CARMEN SANTAMARÍA

**OCCUPATION IN FOCUS:**

HOSPITALITY AND  
RETAIL MANAGERS

**MEMBER STATE:**

SLOVENIA





# CEDEFOP

The **European Centre for the Development of Vocational Training** (Cedefop) is the European Union's reference centre for vocational education and training, skills and qualifications.

We provide information, research, analyses and evidence on vocational education and training, skills and qualifications for policy-making in the EU Member States.



Cover photo:  
© Shutterstock/Halfpoint

Publications Office of the  
European Union, Luxembourg

ISSN: 2363-0183  
TI-AQ-21-003-EN-N  
No of publication: 9160 EN  
**Free of charge**

© Cedefop, 2021. Except otherwise noted, the reuse of this document is authorised under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed provided appropriate credit is given and any changes made are indicated. For any use or reproduction of photos or other material that is not owned by Cedefop, permission must be sought directly from the copyright holders.

Head of Department for  
Communication:  
Gerd-Oskar Bausewein  
Editor: Rosy Voudouri  
Designed by  
Missing Element, Prague

Cedefop: Europe 123,  
Thessaloniki (Pylea), Greece

Postal address: Cedefop service  
post, 57001 Thermi, GREECE

Tel. +30 2310490111  
Fax +30 2310490020  
[communications@cedefop.europa.eu](mailto:communications@cedefop.europa.eu)  
[www.cedefop.europa.eu](http://www.cedefop.europa.eu)



Subscribe  
to the electronic  
edition

# skillset AND MATCH

CEDEFOP'S MAGAZINE  
PROMOTING  
LEARNING FOR WORK

|  |    |
|--|----|
| <b>INTERVIEW</b>   |    |
| QUALIFICATION IS ABOUT INCLUSION AND DEMOCRATIC PARTICIPATION<br><b>João Costa – Deputy Minister for Education, Portugal</b> | 4  |
| <b>ARTICLE</b>   |    |
| FUTURE-PROOFING VET SKILLS AND COMPETENCES   | 6  |
| <b>ARTICLE</b>   |    |
| EU HEALTH: INVESTMENT NEEDED FOR GROWING<br>ELDERLY POPULATION   | 8  |
| <b>INTERVIEW</b>   |    |
| UPSKILLING KEY FOR EU HEALTH SECTOR<br><b>Stella Kyriakides – European Commissioner for Health and Food Safety</b>           | 10 |
| <b>#LMSINEXT</b>   |    |
| HOW TO SHAPE NEXT-GENERATION SKILLS INTELLIGENCE   | 12 |
| <b>INTERVIEW</b>   |    |
| VET TEACHERS NEED SUPPORT<br><b>Carmen Santamaría – Director, CIFP Profesor Raúl Vázquez, Madrid</b>                         | 14 |
| <b>OCCUPATION IN FOCUS</b>   |    |
| HOSPITALITY AND RETAIL MANAGERS  | 16 |
| <b>MEMBER STATES</b>   |    |
| RESPONSIVE AND INCLUSIVE VET IN SLOVENIA   | 17 |
| <b>ARTICLE</b>   |    |
| CIRCUMSTANCE: THE KEY TO ADULT LEARNING PARTICIPATION<br>BASED IN GREECE, WORKING FOR EUROPE                                 | 18 |
| <b>ARTICLE</b>   |    |
| BASED IN GREECE, WORKING FOR EUROPE  | 20 |
| <b>NEW CEDEFOP PUBLICATIONS</b>  | 22 |
| <b>COMING UP</b>   | 23 |

# Vocational skills

# fuel

# public health

JÜRGEN SIEBEL

CEDEFOP EXECUTIVE DIRECTOR



*Adaptability, as we now know, is the most critical skill to cope with an unprecedented pandemic*



Frontline responders, essential workers and carers... in the early days of the crisis, such heroes of the pandemic were cheered from rooftops and in the streets. Later, the discussion moved on to whether or not their pay matches the appreciation and gratitude people feel these healthcare workers deserve.

While doctors are academically trained, the vast majority of healthcare workers have a background of vocational education and training (VET). Lucky us! Cedefop has argued repeatedly that vocational learners acquire adaptability as a key transversal skill, and that, as we now know, is the most critical skill to cope with an unprecedented pandemic.

This *Skillset and match* edition looks into the skills systems that underpin the public health systems. Read the interview with Health Commissioner Stella Kyriakides, in which she explains how crucial education and training are in tackling health challenges.

On the last day of the Portuguese EU Presidency, I had the privilege of sharing the (virtual) stage of Cedefop's Brussels seminar with João Costa, Portugal's Deputy Minister for Education. On our topic, lifelong learning, he said that it is as important as elementary school. In our interview with him, Mr Costa shares several other striking insights.

Lest we forget: all that VET can do to help our societies and economies to master and shape the transitions rests to a large extent on whether or not people are willing and able to accept what VET offers them. Read what the second edition of our opinion survey on VET reveals.

Predicting tomorrow today and understanding today in real time are two favourite activities of Cedefop researchers. Read how online tools and surveys help us to grasp the future of work and the next generation of skills intelligence.

Finally, this edition looks at the Slovenian EU Presidency and at a Greek anniversary. Enjoy! ■

# Qualification is about inclusion and democratic participation

© Government of the Portuguese Republic



JOÃO COSTA

“ *It is impossible to think of building a more digital and green Europe if youngsters are not qualified for that, and if adult education and qualification do not provide the necessary skills for them*

DEPUTY MINISTER FOR EDUCATION, PORTUGAL

João Costa is a Professor of Linguistics at Lisbon's Universidade Nova. He is the author of several books and over 100 articles and book chapters. An experienced politician, now serving a second term in government at the Ministry of Education, he believes that education and training is 'a major shared value' in the European Union. This, he argues, was again demonstrated by the commitment of the EU Member States in May's Porto Social Summit to reach a 60% annual enrolment rate in lifelong learning by 2030.

Mr Costa was invited to open the Cedefop Brussels seminar with the Portuguese EU

Presidency in June (see pp. 6-7), at which the 'future-proofing' of vocational education and training (VET) skills and competences was explored. *Skillset and match* caught up with him following the event to discuss the achievements of the Presidency in relation to education and skills, the initiatives in Portugal to adapt to an ever-changing labour market, and the role of key competences in VET and lifelong learning in the wake of the coronavirus pandemic.

**Continuous investment in VET with a focus on digital and green skills was among the Portuguese EU Presidency priorities. How successful do you feel you have been in that respect?**

These past months put across or reinforced the importance of several areas in the European debate and in the setting of priorities for the future. The agenda of meetings, formal and informal, speaks for itself. Sustainability and the advances in digital skills were not isolated topics, but embodied in several areas of intervention. It is impossible to think of building a more digital and green Europe if youngsters are not qualified for that, and if adult education and qualification do not provide the necessary skills for them. During Portugal's EU Presidency, several consensuses have been reached in this domain with an impact on the coming years, and on the recovery and resilience of the EU after the pandemic. The commitment of the EU Member



© Shutterstock/lightpoet

States to reach a rate of 60% enrolment in lifelong learning, reached during the Porto Social Summit, is of utmost importance, since it reflects education and training as a major shared value within the Union. The time of the Portuguese Presidency was also the period for the preparation of the national plans for recovery and resilience, with a great focus on the role of education as a most prominent tool for the recovery of the countries.

**Your country is also working to enhance digital skills among its population. The Youth + Digital (Jovem + Digital) programme, launched last year, targets young unemployed, aiming to improve their digital competences. What are the results so far? What other initiatives are you taking to boost citizens' competences in a constantly changing labour market?**

As mentioned, it is impossible to foster digitalisation without qualifying the population. There is a strong commitment in the recent Portuguese labour legislation to lifelong learning, upskilling and reskilling. The Portuguese plan for recovery and resilience has a strong focus on the qualification of adults as

one of the pillars for recovery. Portugal inherited, after almost fifty years of dictatorship, a devaluation of education and a low-skilled active population. The strategy developed for the coming years is a further step in the Qualifica Programme, through which half a million adults have already been certified since 2017.

**Digital is one of the key competences that people now need in life and employment. How do you see their role in vocational education and training and lifelong learning, especially in the wake of the pandemic?**

The pandemic was an accelerator of digital skills, but also induced a reconfiguration of the labour world. Remote working, new skills required, new jobs created in the digital area require new and reinforced skills. Qualification is about inclusion and democratic participation. The digital revolution was already here, and became a super-fast revolution due to the pandemic. Failing students and adults in this area would mean leaving them out of the possibility to thrive.

**How can organisations such as Cedefop help Portugal address the current skills challenges?**

Cedefop is a forum for reflexion, networking and cooperation. The longstanding tradition of feeding us with recommendations and promoting reciprocal knowledge among EU members is a great contribution.

**A ground-breaking Cedefop project supports refugees' skills-based pathway in the EU. The Agency has been working with the Portuguese authorities and employers to help adult refugees in Greece pursue job opportunities in Portugal and legally cross borders for employment. In your view, can this help businesses find the skills they lack?**

Refugees are citizens. Businesses do not work without people, and people do not survive without work. This means that states have the duty to qualify them to have access to jobs, and businesses have the duty to provide opportunities to everyone. ■

More on the  
Porto Social Summit



Cedefop project: Key  
competences in vocational  
education and training





# Future-proofing VET skills and competences

“ *Given the rapid changes in technologies and labour markets, transversal skills and competences are deemed increasingly important and critical for future-proofing vocational education and training* ”

On the last day of the Portuguese EU Presidency (30 June), Cedefop organised its 10th Brussels seminar with the rotating Presidency to discuss future-proofing vocational education and training (VET) skills and competences. The event focused on how we can modernise the supply of VET and how the institutions and programmes can train individuals in ways which enable them to meet the (partly) unpredictable challenges of the future. The two main aspects are: future-proofing VET content and ensuring a continuous dialogue (the feedback loop) between VET institutions and the labour market.

It is easy to think of VET as being exclusively about specialised, technical skills related to tasks or occupations. While these skills indeed play a key role, and require continuous updates, they build on a basis of general and transversal skills and competences, enabling the learner to adapt and evolve in complex and unpredictable situations of life and work. Given the rapid changes in technologies and labour markets, these transversal skills and competences are deemed increasingly important and critical for future-proofing VET (and education and training in general). The EU key competences framework illustrates an effort to politically operationalise these skills and competences, giving a direction to their implementation and development.

## KEY CHALLENGES

Acquisition of key competences remains a challenge in Europe. Cedefop’s work on key competences, as

well as on transversal skills, illustrates the challenge involved. The 2020 study ‘Key competences in initial vocational education and training: digital, multilingual and literacy’ showed that literacy is crucial for the development of knowledge and understanding across all other subjects. It is also linked to better memory and thinking performance. However, more than one in five 15-year-olds in the EU still have low reading skills, and this has not improved in recent years.

Knowledge of languages improves communication and cooperation and helps people to adjust better to modern multicultural societies. In contrast, limited multilingual competence may prevent individuals from exploiting their full potential. An increased need to invest more in digital competences to master the digital transformation has also been identified.

At the beginning of 2021, Cedefop started work on entrepreneurship competence in VET. It aims to understand better how entrepreneurship is embedded in initial VET (school-based and work-based, including apprenticeships). It will also analyse continuing VET leading to formal qualifications. The findings will support policy-makers, social partners, VET providers and other stakeholders across Europe in promoting entrepreneurship competence.

As for future-proofing VET, it is crucial to consider that, in the changing landscape, VET systems will increasingly need to combine the initial education and training of young people with a stronger focus on continuous training of adults. While there is a



© Shutterstock/Creative Lab

general agreement across Europe on the urgency of this move towards lifelong learning, the implications for the content and profile of VET programmes are not obvious. It is also important that VET institutions do not operate in isolation; they must continuously interact and engage in dialogue with the labour market. This feedback loop is frequently imperfect and prevents timely review and renewal of programmes and qualifications.

### FEEDBACK BASED ON LEARNING OUTCOMES

Cedefop has analysed in several projects the changing content and profile of VET qualifications and programmes. As the study ‘Comparing vocational education and training qualifications: towards a European comparative methodology’ showed, a feedback loop based on learning outcomes helps get deeper insights into what is required by the labour market, what is offered in training provisions and what is assessed at the end of a learning programme. It can also provide insights into how the learning outcomes achieved by qualification holders are perceived in the labour market and by their employers. This type of feedback can help shape better the specific profile of qualifications, giving important information to qualifications authorities and providers.

At the Brussels seminar, discussions focused on future-proofing; that is, what needs to be done when things are in flux, as current developments show them to be. VET should not ignore the changing world around it. Interestingly, the US labour market information system O\*Net annually replaces 10% of its

extensive list of occupational skills and competences. The O\*Net of 2031 will look very different from today’s version. There is no reason to expect anything different for Europe: O\*Net’s European equivalent, ESCO, faces the same challenge.

### DEMAND AND SUPPLY

In view of these changes, how can we make sure that European VET stays relevant and continues to deliver high-quality programmes and qualifications in the future? Cedefop is carrying out extensive work in various areas that responds to this need. Understanding the changing demand for skills and competences in the labour market and society is of key importance; Cedefop has over the past two decades invested heavily in skills forecasting and intelligence. Increasingly using big data, the analysis of European job vacancies gives us insights into changing demands and priorities.

Understanding demand is not, however, sufficient, so Cedefop is systematically analysing the supply and delivery of VET skills and competences. As the seminar results showed, looking at the institutions delivering VET as well as the content and profile of programmes and qualifications provide us with important insights into VET’s relevance and quality. ■

More on the Cedefop Brussels seminar with the Portuguese EU Presidency



Cedefop study: ‘Key competences in initial vocational education and training: digital, multilingual and literacy’



# EU health: investment needed for growing elderly population

“ *Incentives to follow a career in health occupations should be prioritised* ”

Europe’s population is ageing rapidly, and so is its workforce. This phenomenon may not be new to Europe, but it is expected to have considerable and potentially disruptive effects on several aspects of society and the economy, including the labour market.

We may consider the structure of the workforce, by age group, as a spinning top which needs to be thick in the middle (i.e. populations of prime working age) and thin on the top and bottom (i.e. younger and older groups) for the top to keep spinning for a long time. However, as Cedefop’s skills forecast well documents, in the years up to 2030 ageing will result in a gradual ‘thinning in the middle’ and a simultaneous growth at the top, which increases its imbalance and threatens to disrupt its motion.

## A PUZZLE FOR POLICY-MAKERS

The intense workforce ageing by 2030 will reduce the available pool of young workers required to fill positions left vacant by retiring personnel or job switches. Future hiring difficulties are expected to be more intense in certain occupations (mostly the high-skilled ones) and EU Member States (especially the newer ones and bigger economies) in which high levels of future replacement needs are combined with faster ageing.

Policy-makers are further challenged by this phenomenon when one considers the need for faster digitalisation of the EU labour market to ease the transition to a digital economy and shield economies

from further events like the coronavirus pandemic. In this sense, workforce ageing jeopardises the EU’s adaptability to the future of work, as the latter is defined in a post-pandemic world.

In the face of a global pandemic that has threatened the lives of millions of people, mostly of older age, and has brought even the best-prepared health systems to the brink of collapse, future population and workforce ageing are also a challenge for the capacities of health systems across the EU.

## DIFFERENCE IN PACE

It is, therefore, interesting to investigate whether the investment in health services across EU countries takes into account future needs due to population ageing to the extent that it should. As Member States are not ageing at the same pace, we should anticipate that, other things being equal, future investment in health (expressed as employment demand projections for the health sector) would match the intensity of population ageing in different countries.

The infographic presents a categorisation of the 27 EU Member States based on the relative pressure of population ageing in their health sectors in 2020 and the expected expansion or contraction of employment in health by 2030. It appears that demand for health-related professions does not seem to consider ageing to the extent that it should.

While for some countries with high-pressure employment, forecasts indicate noteworthy





© Shutterstock/DC Studio

% change in health sector employment, 2020-30

Pressure on the health system by ageing, 2020  
(People aged 65+ per health-related employee)

|                                  | VERY LOW<br>(0-2) | LOW<br>(2-4)                                 | HIGH<br>(4-8)                                       | VERY HIGH<br>(8-10) |
|----------------------------------|-------------------|--|---|---------------------|
| POSITIVE, above<br>EU-27 average | Ireland           | Austria<br>Belgium<br>France<br>Sweden       | Cyprus<br>Estonia<br>Poland<br>Slovakia<br>Slovenia | Romania<br>Greece   |
| POSITIVE, below<br>EU-27 average | Luxembourg        | Denmark<br>Finland<br>Germany<br>Netherlands | Croatia<br>Czechia<br>Hungary<br>Latvia<br>Portugal | Bulgaria            |
| NEGATIVE                         |                   |  | Italy<br>Lithuania<br>Malta<br>Spain                |                     |

Source: Cedefop.

investment in health (e.g. Greece, Romania and Bulgaria), this is not the case elsewhere. The health systems of Spain, Malta, Italy and, especially, Lithuania are expected to face the most intense pressure within the coming decade, while similar challenges may arise for the capacity of health sectors in Portugal, Czechia and Croatia, where employment in health is forecast to change only negligibly by 2030, indicating a similar inactivity in coping with ageing.

In Hungary and Latvia, health employment will increase, but at a lower rate than the EU average. On the other hand, in all countries in which population ageing appears to be less of a concern currently for health systems, employment in health is forecast to increase by 2030.

### EXPOSED BY THE PANDEMIC

The need for investment in health across the EU was made more apparent than ever during the pandemic. As Cedefop research reveals, during the COVID-19 crisis the shortage of medical staff led to healthcare providers using every channel possible for recruiting personnel, indicating the lack of preparedness of many countries' healthcare systems.

Nevertheless, even though the rising demand for health services is well documented in Cedefop's skills forecast, the levels do not seem to go hand-in-hand with the intensity of ageing that each country faces. Paradoxically, countries in which pressure is low are expected to invest much more

in health compared to many others facing much greater pressure.

The determination of several EU countries to further invest in their health system to strengthen resilience in a post-pandemic world could result in 'feeding two birds with one scone' if population ageing is also considered as a factor when determining future investment. At the same time, incentives to follow a career in health occupations should be prioritised. The stronger resilience of a country's health system can and should go hand-in-hand with adequately meeting the needs of its elderly population. ■

Cedefop skills forecast

Skills forecast: trends and  
challenges to 2030Cedefop briefing note: Trends,  
transitions and transformation

# Upskilling key for EU

## health sector



STELLA KYRIAKIDES

EUROPEAN COMMISSIONER FOR HEALTH AND FOOD SAFETY

“ *We will look into ways of funding training for Europe’s medical and healthcare professionals* ”

The upskilling of healthcare workers is a key component for better health services, says European Commissioner for Health Stella Kyriakides. In an exclusive interview, she tells *Skillset and match* that the European Union has the tools to support Member States in building sustainable healthcare systems for the future, adding that the coronavirus pandemic has shown how united and decisive action by the EU can bring added value for citizens.

**They say hindsight is always 20/20, so all Europeans would like to hear from you what lessons the EU has learnt from the pandemic.**

The coronavirus crisis has taught us that through united and decisive action the EU can bring added value in delivering for Europeans in the area of health, too. Of course, lessons have been learnt. We have seen that science was faster than industrial production in developing vaccines, and we are now working to prepare for future health crises by avoiding the bottlenecks in supply and production we experienced during the pandemic. We have also seen the importance of being able to approve innovative treatments and vaccines rapidly in times of crisis. By strengthening the European Medicines Agency’s mandate, we can empower our experts to make quicker decisions that will make these critical tools available, while

maintaining our rigorous safety and effectiveness standards.

**Increased demand for health services, due to an ageing population, was exacerbated by the pandemic. What can Europe do to cope?**

The crisis has clearly highlighted the gaps in our healthcare systems, which can be linked to underinvestment across the board over recent years. As a result, they were simply not ready to cope with a crisis of this magnitude. Through NextGenerationEU, we have made it a priority to support healthcare systems across the Member States to build back stronger. With massive financial firepower leveraged through the collective will of 27 Member States and the European



Commission working in unison, we want to build a safer and healthier EU so that we are better prepared for any future crisis. In addition, our ambitious and standalone EU4Health Programme will make EUR 5.1 billion available to support the process of building the healthcare systems of tomorrow and enabling them to deliver better care for patients across the EU. A crucial part of this is supporting the strengthening of national health systems, preparedness exercises and the upskilling of medical, healthcare and public health staff.



**Cedefop research suggests that, by 2030, in many Member States employment in the health sector will not be keeping pace with the health system's increased needs. Does the EU plan to encourage national governments to invest more in health to prevent a crisis, and does it have enough tools to do that?**

Although the provision of healthcare is first and foremost a competence of the Member States, the COVID-19 pandemic has shown more than ever the need for strong and resilient health systems that deliver for our citizens. However, I believe that there is scope for us to do much more together, and to cooperate much more closely in the area of public health. With NextGenerationEU, we will work with all EU countries to be prepared for future health threats. This means we will invest more in modern healthcare systems that can withstand the pressure of a pandemic, and can fully serve the needs of our citizens, not just for new diseases like coronavirus but also for non-communicable diseases such as cancer. We will also aim to modernise our

health systems so that hospitals in every Member State have better access to innovative health solutions and essential medical supplies. Finally, we will look into ways of funding training for Europe's medical and healthcare professionals. Through our ambitious EU4Health Programme, as well as our European Health Union proposals, we have the necessary tools to support our Member States in building sustainable healthcare systems for the future.

**Would you say Member States have given due focus to healthcare as part of their national recovery investment or would you rather see them dedicating more of their Recovery and Resilience Facility (RRF) share to the health sector?**

A healthy workforce is the fundamental basis of a strong and resilient economy and society. This is why the RRF, as part of NextGenerationEU, has made investment in healthcare systems one of its key benchmarks for the EU's recovery. In this regard, I am encouraged not only by the level

of investment in health in the plans of the Member States, but also by the broad variety of areas in which this investment is being made. From strengthening primary healthcare provisions to the training of medical staff, improving resilience for future health crises and investing in innovative healthcare solutions, all Member States have understood the importance of investing in strong healthcare systems that deliver for citizens.

**Hiring more health workers may be necessary but upskilling the health workforce could also be considered efficient investment. Do RRF plans take this notion sufficiently into account?**

The upskilling of the healthcare workforce has been identified as a key priority through our EU4Health Programme and has been addressed in many Member States' RRF plans. To develop the strong and sustainable healthcare systems of tomorrow, which incorporate more innovative and digital health solutions, the upskilling of healthcare workers is a key component for delivering better everyday health outcomes for citizens. ■

# How to shape next-generation skills intelligence



*The future of work is here. Shaping it in desirable ways makes skills intelligence more important than ever*

Future-oriented labour market and skills analysis has been around in different shapes and forms for decades. We have come a long way since the mechanistic ‘manpower planning’ approach, taken to understand future labour market needs and planning education and training, emerged after World War II. More policy-oriented approaches, which use evidence to influence decisions, recognise that pure planning is at odds with how modern market economies function. They also embrace the idea that single tools or methods (e.g. skills forecasts) provide only part of the answer. Understanding what economic, social and other megatrends mean for the worlds of work, education and training requires a holistic, multidisciplinary approach informed by a wide range of quantitative and qualitative methods and tools.

## FUTURE OF SKILLS INTELLIGENCE

The future of work is here. Shaping it in desirable ways makes skills intelligence more important than ever. Cedefop takes a leading position in developing skills intelligence for the European Union – not only via its forecasts, skills surveys, real-time labour market analysis, analytical work and targeted dissemination but also by advocating that weaknesses in national skills intelligence systems or approaches be addressed, and by providing access to methodological expertise.

The next challenge for skills intelligence is to make it fit for the future of work. Cedefop cannot do this alone. We interacted extensively with our key stakeholders, mostly labour market and skills intelligence (LMSI) users or developers, to reflect on how to shape next-

## ACCESS TO SKILLS INTELLIGENCE EXPERTISE

### RECENT CEDEFOP PUBLICATIONS

Three Cedefop practical guides inform analysts and policy-makers about available skills anticipation methods used to navigate through the uncertainty of changing technologies and skill demands.

- **Skills surveys and skills forecasting**
- **Big data and artificial intelligence methods**
- **Technology and skills foresight**



The publication of the interagency technical and vocational education and training (TVET) group on skill mismatch in digitised labour markets shows how big data can be used for policy to help mitigate labour market challenges, improve skills matching and strengthen links between the labour market and education and training.

- **Perspectives on policy and practice – Tapping into the potential of big data for skills policy**







© Shutterstock/Alexander Supertramp

generation skills intelligence at a high-level conference last April. The insights these skills intelligence users and developers provided are important pointers for the direction we will take with our work, and set the stage for how we will work in the coming years.

### FOCUSING ON TRANSITIONS

Most stakeholders view the skills intelligence currently available as primarily used to inform education and training (86% of respondents) and employment (63%). One in three stakeholders think that LMSI also has a focus on digitalisation. Very few think it supports other thematic or transversal areas such as migration, competitiveness and environmental sustainability. There appears to be

### WHAT STAKEHOLDERS THINK

SKILLS INTELLIGENCE SHOULD FOCUS ON IN THE FUTURE



Source: Cedefop stakeholder survey held in the run-up to the 13 April 2021 high-level conference ‘Getting the future right’.

a disconnect between what those in charge of developing skills intelligence intend to achieve and the actual outcomes. Developers and providers are much more positive than skills intelligence users about stakeholder engagement and are more optimistic about its use and customisation to the needs of different groups.

For a clear majority of respondents, more and better information on skills in jobs and on emerging skills needs is a clear priority. When asked to reflect more generally on what next-generation skills intelligence should be about, many suggested that it should be more able to support transitions, not only at individual level via up- or reskilling, mobility and learning, but also at the level of economies and societies. Better information on skills is also key to shaping Europe’s twin digital and green transitions, managing demographic challenges and helping companies, workers and enterprises move to new ways of organising work.

### DELIVERING ON SKILLS INTELLIGENCE AMBITIONS

In the coming years, Cedefop will place emphasis on making better use of existing sources and collecting new data to shed light on the employment and skills impacts of megatrends. Apart from expanding analytical work using online job advertisements, we will also focus on innovative quantitative surveys and qualitative approaches to better understand digitalisation, the impact of artificial intelligence and the green transition. A dedicated *Learning in work* survey, to be fielded in 2023, will help us reflect on how work itself can be shaped to encourage skills development and how workers, employers and policy-makers can contribute to meeting the skills challenges of this decade. ■

# VET teachers need support

“ *Training is essential for everything. For example, in our school it's vital that companies offer refresher courses for teachers, not just students* ”

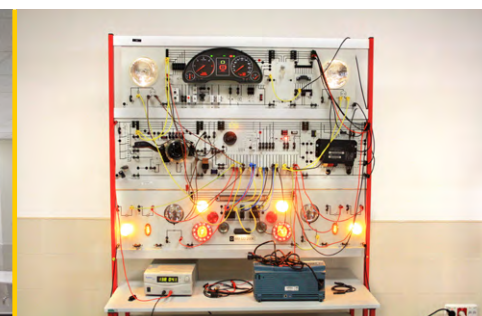
Carmen Santamaría has devoted her professional life to education. She has been director of Madrid's vocational school CIFP Profesor Raúl Vázquez for over 10 years. 'I am in love with vocational education and training (VET). I truly believe in it. I think the kids we teach have a bright future,' she says, making it clear that she does not plan to change careers any time soon despite the challenges she, and many teachers, face. In an interview with *Skillset and match*, Ms Santamaría talked about the

importance of VET teachers' professional development and how Cedefop's work can help them navigate the challenges.

**What kind of support do you need as VET teachers to keep up with the rapid technological and societal changes, e.g. digitalisation, greening of the economy, globalisation, etc?**

Training is essential for everything. For example, in our school it's vital that companies offer refresher courses for teachers, not just students. The equipment we work with is being updated constantly, so you must know it very well

before training the students. The problem is that such courses often clash with school hours. One idea is to hold these trainings in July or September when classes are off and teachers have more time. Or, if they must take place during working hours, the teacher should be substituted. We also need more training in new technologies. In my school, we've been working with online programme Aula Virtual since 2010. When the pandemic arrived last year, it didn't affect us much because we were all already online. But some of the new teachers have not worked with such tools and need time and specific training. Then there is





the language issue. We work with many European Union countries, Erasmus+ students, etc. But often you can't send teachers abroad because they don't speak foreign languages.

**How can Cedefop's work in this field help you maintain high-quality professional development throughout your career?**

The tools Cedefop develops and the actions you are taking are very useful. But still, I believe there is a need to filter them down more, so they can reach teachers, management teams, schools, etc. Also, companies are often unaware of vocational training possibilities. Cedefop's work can help a lot in this regard, acting as a link between companies and schools.

**What innovative policies or new programmes do you think are needed to help professional development of VET teachers?**

Teachers' career prospects are short and limited. The ceiling is very low. In Spain, every public-school teacher knows the possibilities they will have in their career from the start. You know you'll be teaching your whole life. The only thing you can achieve is to be promoted to department head, head teacher or, at best, director. We need to widen those prospects and facilitate continuing training. If you don't take training courses, you will end up teaching students outdated material. If teachers are not prepared, they

**CIFP PROFESOR RAÚL VÁZQUEZ – MADRID, SPAIN**

- Public vocational education and training in **TRANSPORT** and **LOGISTICS**
- **700** students
- Dual training in **AUTOMOTIVE, AIRCRAFT** and **RAILWAY**

**PRODUCTION** and **MAINTENANCE**

- Advanced facilities and educational resources (laboratories, aircraft simulators, scale models)

become obsolete professionals. Unfortunately, we are getting trained at the expense of our free time. Many people cannot take these courses because of lack of time, family duties, etc. We need to have training as a part of our working time.

**What do policy-makers still need to understand about the importance of VET?**

Little by little, VET is being given the relevance and importance it deserves, but it is not there yet. Promotion campaigns are not sufficiently robust for VET to be known and recognised by the whole of society. When VET students come to school, they often think they are doing lower-category studies, but nowadays it is quite the opposite. You can definitely end up in a higher-level position. We have enough university graduates, but we need a lot more VET professionals. Iberia, for example, does not need as many engineers as aircraft maintenance technicians. You need maybe five engineers for fifty technicians. There should be much more aggressive campaigns to make the potential

of VET known. People don't realise how many professional opportunities, positions and specialisations there are.

**In your view, how can Cedefop help strengthen the links between education and the labour market?**

Working on soft skills is fundamental for us. We focus a lot on teaching teamwork, attitudes, responsibility, values, etc. It is what companies ask for in a job interview. If you have graduated, they already know that you have the technical knowledge. They need to see if you have the soft skills they require. You can have wonderful technicians who will not be hired if they don't have these skills. We often organise exchanges of information between companies and students. We have brought in experts, for example, from Airbus HR, and they tell the students that the first thing they look for is attitudes and values. The tools that Cedefop has developed help a lot in this respect and help us guide the students, but we must find a way to reach all levels of the teaching profession. ■



© CIFP Profesor Raúl Vázquez

# Hospitality and retail managers

Vocational education and training (VET) is key for preparing people for a career in hospitality and retail management. Almost half of hospitality and retail managers have a secondary VET qualification, and the fact that many of them have exciting, respected and well-paid jobs contributes to a positive image of these career pathways.

However, the coronavirus pandemic and the slow economic recovery that followed has taken a heavy toll on their employment and job prospects. Jobs in hospitality suffered the most. While the retail sector was also affected, the rapid shift towards ecommerce and changing purchasing patterns helped to keep retail businesses and jobs afloat.

Different trends illustrate this. Employment in the wholesale and retail sector decreased by 3% between 2019 and 2020; in hospitality, employment shrank by 13%. Cedefop's online job advertisement analysis (skills OVATE) shows that the number of newly advertised jobs for wholesale and retail managers remained almost unchanged in 2020, while for hospitality managers it dropped by almost 40%.

Despite many businesses going bankrupt and job losses, the trends we see are not only about decline.

Throughout 2020 and in early 2021, employment trends in hospitality and retail also reflect businesses coping with change and adapting to a new and radically transformed business environment. In retail and hospitality, the changes in employees' core tasks caused by the pandemic were more pronounced than in other economic sectors.

## HOSPITALITY AND RETAIL MANAGERS

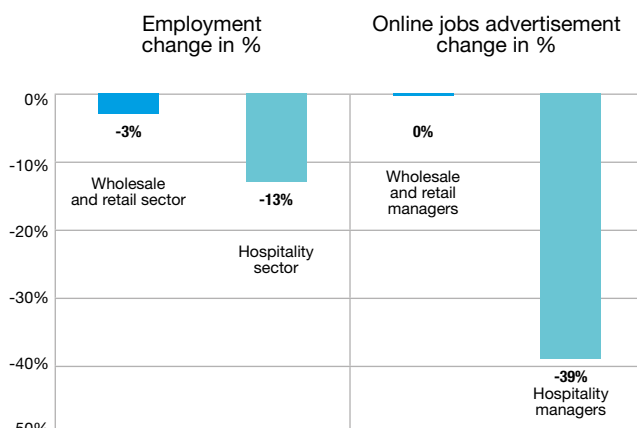
- 2.3 million in the EU (2019)
- 37% female
- 47% with secondary VET qualifications
- 7% employment growth forecast up to 2030

Digitalisation is key to survival. In the first few months of the pandemic, ecommerce expanded to a level originally forecast to occur around 2025. Retail managers steered this process, ensuring that technology adoption, business processes and workers' skills were up to the challenge.

For hospitality managers, some challenges were daunting. Apart from digitalisation (e.g. remote hotel check-ins and food ordering), the pandemic led to much stricter occupational safety and cleanliness standards. On top of this was the need to manage business through long periods of disruption and find new customers and markets at a time of rapidly changing travel and leisure preferences.

Hospitality and retail managers are among the occupations most affected by the pandemic. VET and skills development have been and remain crucial in helping them manage this extremely challenging period. ■

### Job demand and employment shifts during 2020



Source: Cedefop.

Cedefop skills OVATE  
webtool analysis







Vocational education and training (VET) is increasingly appearing in Slovenian public debate about developing an innovative, internationally open and environmentally friendly society. The focus is on a responsive VET system that supports individuals in lifelong learning, regardless of the learning environment, on a sustainable and digital transformation of VET, on developing new forms of learning, and on strengthening recognition of non-formal and informal learning.

At the local level, the school centres with their wide range of educational options and resources are attractive for young people, who have at their disposal modern inter-company training to acquire basic professional skills. The openness of educational programmes enables training in the fields that are prioritised by local companies.

Approximately 65% of the population enrolls annually in initial VET programmes. Upper secondary schools are open to all students, embracing both those who want to continue education and those who struggle to acquire a qualification. Due to the system's openness and flexibility, and to well-designed counselling, the dropout rate is among the lowest in the EU, at 5%.

## Responsive and inclusive VET in



But there is still work to be done. Challenges in the coming period are:

- the regulation of apprenticeship, which requires intensive dialogue between ministries and social partners;
- ensuring the labour market relevance of initial VET qualifications at all levels;
- encouraging more intensive involvement of companies in VET.

Public and private adult education providers offer non-formal reskilling and upskilling programmes. The national vocational qualification system for recognising non-formal and informal learning has been successfully established in many companies and complements employee training. Formal continuing VET programmes are scheduled for introduction in the coming years.

With the new national programme for adult education 2021-30, Slovenia will increase public and private investment in adult education. As the current EU Presidency holder, it will strive to renew the European agenda for adult learning to contribute to the development of integrated, high-quality and inclusive education systems for all, especially those who lack access to learning, including online learning. ■



by REFERNET  
SLOVENIA

# Circumstance: the key to adult learning participation

“ *Adults regard learning and training as very important and associate them with strong employment-related and personal benefits* ”

The attractiveness of learning and training is not a problem among adults. The latest report on the findings of Cedefop’s adult opinion survey clearly shows that adults regard learning and training as very important and associate them with strong employment-related and personal benefits. Adults also expect learning and training to become more important in the future, and an overwhelming majority agree that governments should prioritise investment in them.

There had been a concern that adults did not participate in learning and training because they had a negative image about them. This lack of ‘attractiveness’ was thought to be a reason why Europe consistently failed to reach its target for adult participation in learning and training; the target was 15% by 2020, but the level achieved was around 11%.

## LOW PARTICIPATION EXPLAINED

The Cedefop survey interviewed more than 40 000 adults aged 25 and over in the EU, Iceland and Norway. The latest report examined how adults’ personal characteristics and circumstances, such as their age, education level and occupation, influence their views about learning and training, while the first report considered their views by Member State. The findings in both reports clearly demonstrate that low participation by adults in learning and training is not because they regard them as unattractive learning options.

Adults participate in formal and non-formal work-related learning and informal learning on their own for career progression, to improve specific skills and for their own personal development. However, there appears to be a disconnect between why adults participate in learning and training and

the main reason why they do not. Although 64% of adults working in elementary occupations and 94% of professionals said their job required them to keep their skills constantly up to date, most adults said they did not participate in learning and training because they ‘have no need’. This implies that, in some cases, lacking skills is not sufficient motivation for adults to participate in learning and training.

## FUTURE BENEFIT

Motivation to participate, irrespective of age, education level and occupation, seems to be linked to an abstract idea of some future benefit. For example, young adults defer entry into the labour market and attend university because there is strong evidence of obtaining higher rewards (pay, status) later. The risk is seen as relatively low. However, the decision on who receives the employment-related benefits of adult learning and training is not usually made by the participant, but by the employer.

Participation in adult learning and training does not guarantee a pay rise, promotion or job. Consequently, although its importance is recognised, participation is easier to defer (due to time and other constraints) if the reward is not either immediate or guaranteed within a defined period. Adults who participate in learning and training for personal development have more control over the reward. They are self-motivated to participate and their goal may be linked to well-being rather than employment.

Motivation to participate appears, therefore, to be contingent on individual circumstances. Transitions to and from work, as well as within work (promotion, new tasks, new location) are circumstances in which learning and training can help adults. However, those





circumstances are personal and unique. Learning and training needs, therefore, are also personal and unique.

### FOCUS ON INDIVIDUALS

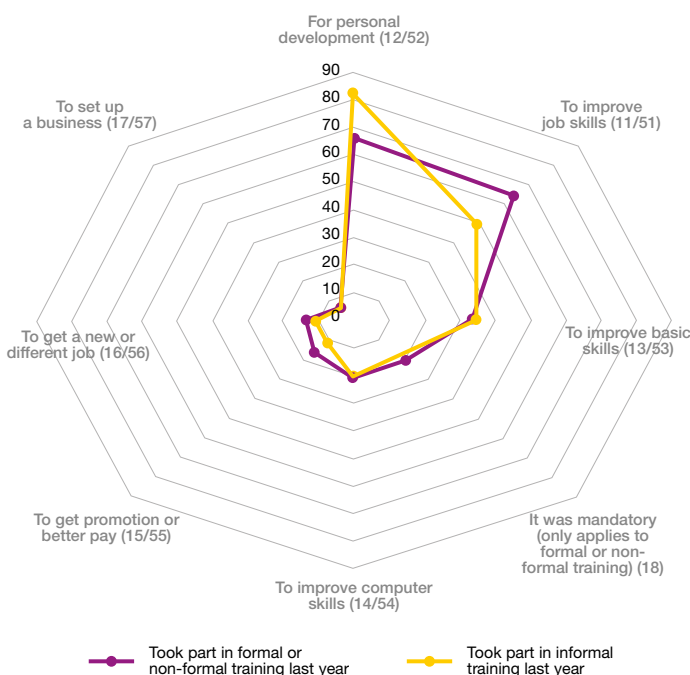
The implications of the survey’s findings for European vocational education and training (VET) policy are significant. VET’s role is to equip adults with the skills to manage their labour market transitions; to enable them to shape their own futures and in so doing ensure Europe’s successful transition

into an equitable green and digital economy and society. European VET policy has tended to focus on ‘groups’ that are more likely to be affected by low skills and high unemployment, such as young people and those who are low-qualified or unskilled. But these groups are neither homogeneous nor are their needs exclusive.

For example, a highly educated single parent (male or female) in a skilled job could benefit from support with family responsibilities or flexible working hours to participate in learning and training, as well as someone who is low-qualified and looking to return to work.

The survey findings indicate that adult learning and training should be more focused on individuals than groups. However, such a learner-centred approach to VET would need to go beyond tailoring learning to individual needs and include other support measures that encourage adults to participate. Combinations of support measures are more likely to encourage participation. There seems little point in providing financial support for an adult to participate in learning and training unless it is supported by advice and guidance. Importantly, through an individual approach VET can be seen to support not only equality but also excellence. ■

**Reasons why adults participate in learning and training  
%, (EU, Iceland and Norway)**



Source: Cedefop.

More perceptions: opinion survey on adult learning and continuing vocational education and training in Europe – Volume 2: Views of adults in Europe



Perceptions on adult learning and continuing vocational education and training in Europe: Second opinion survey – Volume 1: Member States





# Based in Greece, working for Europe

“ *EU Agencies Cedefop and ENISA mark their host country’s double landmark anniversary* ”

The year 2021 is special for Greece as the country commemorates its two most important anniversaries: that of its birth as a modern nation and that of joining the family of European states.

As Greeks celebrate 200 years from the beginning of the War of Independence and 40 years since joining the European Union’s predecessor, the European Economic Community, two EU agencies joined in by marking their presence in the country and letting people know more about their work for Europe and Greece.

The European Centre for the Development of Vocational Training (Cedefop) and the European Union Agency for Cybersecurity (ENISA), two decentralised agencies based in Greece, ran a joint media campaign, honouring Greece’s European anniversary and explaining to the country’s wider public their contribution to vocational education and training (VET) and cybersecurity respectively.

Cedefop, founded in 1975, has been based in Thessaloniki since 1995, while the headquarters of ENISA, founded in 2004, are in Athens.

In their message to the Greek public, the agencies stressed that they serve all European citizens, making the country a pan-European hub in their respective areas: VET and cybersecurity.

## MAKING EU WORK VISIBLE

In a joint interview with the Athens Macedonian News Agency (AMNA), Greece’s main national news provider, the two Executive Directors, Cedefop’s Jürgen Siebel and ENISA’s Juhan

Lepassaar, spoke of their experience working in Greece for the whole of Europe.

‘We are far from Brussels, but that is also deliberate. You might find scale and synergies from bundling everything in Brussels, but this would put the EU administration even further away from citizens,’ said Mr Siebel. He added: ‘While we benefit immensely from being in Greece, I believe that Greece also benefits from our being here, as we also put the EU on the Greek map, demonstrating to everyone that the Union is in part also run from where Europe’s civilization began.’

Mr Lepassaar said it was essential to make the work of the EU visible in the Member States, to help disseminate EU values and promote the initiatives intended to serve EU citizens. ‘At ENISA, we have always kept this dimension of our presence in Greece in mind,’ he noted.

Did he consider himself lucky or isolated to be running an EU agency in the south of Europe, far from the centre? Mr Siebel left no doubt: ‘Lucky! This is Greece. Country, heritage, culture, scenery, cities, lifestyles, climate, food, quality of living – fantastic.’

The campaign, under the slogan ‘Based in Greece, working for Europe’, kicked off on Europe Day (9 May) with a short video presenting the fields in which Cedefop and ENISA contribute to the formation of EU and national policies. In the following two weeks the agencies informed the Greek public about their specific areas of expertise.



CEDEFOP



Cedefop highlighted its public service contribution to EU Member States, and Greece in particular, through:

- skills intelligence projects that help prepare the VET community for the labour market's future jobs demand;
- the development of a European qualifications framework and Member States', including Greece's, national qualifications frameworks, which facilitate cross-border educational and labour mobility;
- research on the state and prospects of apprenticeships in Greece, which assisted in forming a national policy;
- information initiatives, in cooperation with national and local authorities and VET providers, that allow pupils and students to make more pertinent choices for their educational and employment future;
- VET-related policy-planning assistance by way of participating in Greece's relevant national committee.

ENISA focused on its work on:

- Europe's Cybersecurity Policy as well as advice and support to EU-level actors by means of technical guidelines and cybersecurity risk-management frameworks;
- educational assistance to Greek and other Member State authorities, including cyber exercises, incident response and network forensics;
- supporting Greece and all Member States and their national cybersecurity authorities in

reinforcing their cybersecurity infrastructure's resilience and preparedness;

- assisting Greece and all Member States on the implementation of cybersecurity certification to boost trust in our digital economy;
- awareness-raising and promoting education on cybersecurity and online threats.

### WIDE REACH

The joint campaign ran on social media and reached hundreds of thousands among the Greek public, partly thanks to the additional publicity given to it by AMNA, as well as the European Commission's representation in Greece and the liaison office of the European Parliament in Athens.

The representation and the liaison office have also marked the anniversary with a series of events and communication initiatives that trace the history of the country's participation in European institutions throughout the last 40 years. ■

Watch Cedefop  
and ENISA's video



Read Jürgen Siebel and Juhan Lepasaar's  
interview with AMNA (in Greek)



# new

## CEDEFOP PUBLICATIONS



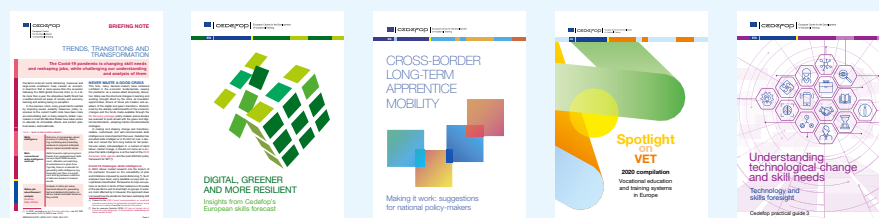
You can browse and/or download  
all Cedefop publications at  
[www.cedefop.europa.eu/publications](http://www.cedefop.europa.eu/publications)  
or by scanning this QR code



### IN FOCUS

#### PERSPECTIVES ON POLICY AND PRACTICE

Web-based data for skills policy can be used to mitigate labour market challenges, reduce skill mismatches and strengthen the links between the labour market and education and training. This publication focuses on overcoming conceptual and practical challenges and limitations, system development and using big data for skills policy in practice. Examples of big-data initiatives from around the globe illustrate their potential and provide insight into how they are already supporting policy-makers in shaping the future of work and education. Prepared by the interagency technical vocational education and training (TVET) group on skill mismatch in digitised labour markets, which includes Cedefop, the publication is addressed to experts and policy-makers who wish to engage in the discussion.



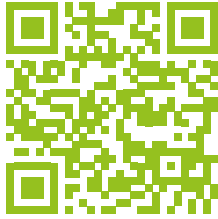
Download the publication you wish  
by clicking on the cover or title

#### OTHER PUBLICATIONS:

- Briefing note – Trends, transitions and transformation
- Briefing note – Apprenticeship: a pill for every ill?
- Digital, greener and more resilient
- Cross-border long-term apprentice mobility
- How many apprentices are there in the EU?
- EFQEA implementation: a Cedefop analysis and main findings
- Spotlight on VET – 2020 compilation
- Understanding technological change and skill needs: skills surveys and skills forecasting
- Understanding technological change and skill needs: big data and artificial intelligence methods
- Understanding technological change and skill needs: technology and skills foresight



# coming up



For the latest information on what's coming up, go to [www.cedefop.europa.eu/events](http://www.cedefop.europa.eu/events) or scan this QR code

## IN FOCUS

# 2021 JOINT OECD/CEDEFOP SYMPOSIUM: APPRENTICESHIPS FOR GREENER ECONOMIES AND SOCIETIES



21-22 OCTOBER  
SYMPOSIUM (VIRTUAL)

The joint Cedefop/OECD symposium on apprenticeship explores the links between apprenticeships and the transition towards greener economies and societies, as well as the implications for policy-making. After a period of relative neglect in many countries, the past decade has witnessed a revival of apprenticeships, in recognition of their effectiveness in easing school-to-work transitions, but also increasingly because of their potential for developing skills closely tied to labour market needs. The symposium will bring together policy-makers, practitioners and researchers from around the world to consider new research and analysis of practices.

## OTHER EVENTS

|          |              |               |  |
|----------|--------------|---------------|--|
| NOVEMBER | <b>17-19</b> | VIRTUAL EVENT | Annual plenary meeting of Cedefop's ReferNet, the network of institutions providing information on national vocational education and training systems and policies in the EU Member States, Iceland and Norway.  |
| NOVEMBER | <b>25-26</b> | VIRTUAL EVENT | Conference presenting the initial findings of Cedefop's project on microcredentials for labour market education and training.  |
| DECEMBER | <b>9-10</b>  | VIRTUAL EVENT | 'New directions for partnerships in lifelong guidance and career development' – Fifth annual meeting of CareersNet, Cedefop's network of independent national experts for lifelong guidance and career development. The meeting is an accompanying event of the Slovene EU Presidency. |



**CEDEFOP**

European Centre for the Development  
of Vocational Training

Europe 123, Thessaloniki (Pylea), GREECE  
Postal address: Cedefop service post, 57001 Themi, GREECE  
Tel. +30 2310490111, Fax +30 2310490020, Email: [communications@cedefop.europa.eu](mailto:communications@cedefop.europa.eu)

[www.cedefop.europa.eu](http://www.cedefop.europa.eu)

Follow us on social media



Publications Office

ISSN 2363-0183



9 772363 017506