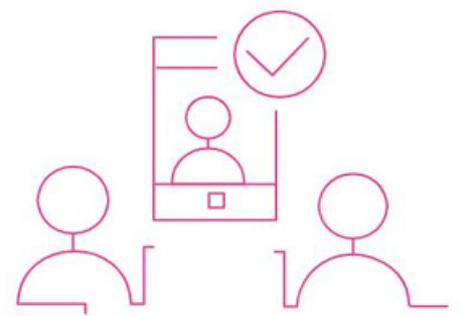
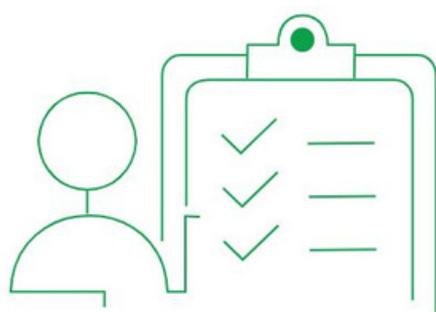


# Executive Summary

<https://project-reset.eu>



# PR2 Report: Executive summary

The executive summary of PR2 include both the primary data from the survey to investigate digital competence needs of the VET practitioners and the desk research of the partners.

**The Survey** questionnaire covers digital competencies of VET providers today and average time of daily activities related to online education - including experiences of the COVID-19 period. Core competences and competence gaps are revealed. Participation in digital training activities to improve skills and needs of training topics are uncovered. Finally, the knowledge and use of the European framework DigCompEdu is stated.

**The desk research** is based on collection and analysis of official documents issued at EU, national and local level regarding dynamics, needs and priorities related to digital skills for VET providers. The research both includes quantitative indicators and qualitative descriptions on digital competence needs of VET practitioners. Furthermore, training available as well as needs and challenges of competence needs are addressed.

**The critical competence needs of the VET providers** will be summarized in the end of the PR2 report.

# The survey

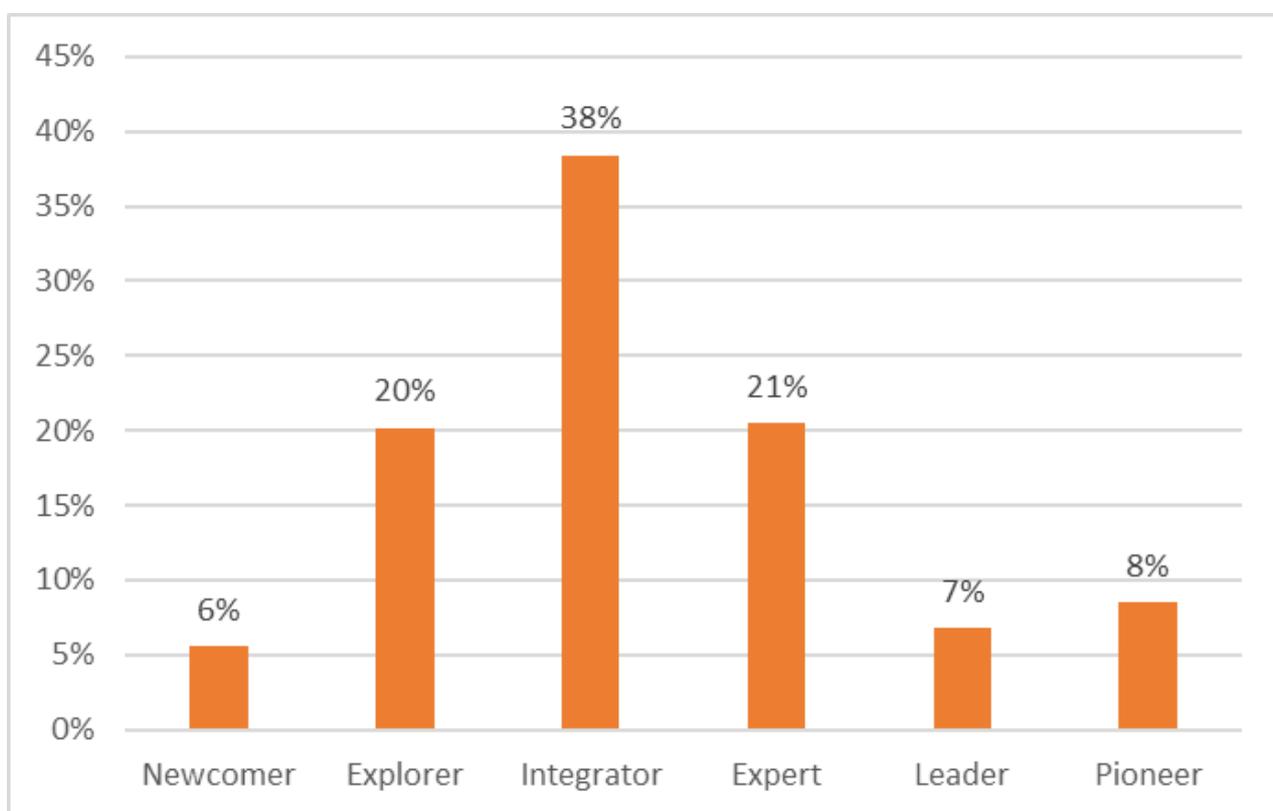
COVID-19 revolutionized the way we live, work and study: Many daily activities have suddenly been translated into a parallel digital world where it is possible to live thanks to the web: family relationships, work, purchases, even education and professional training. The health emergency managed "in an instant" to convince everyone of the usefulness of technologies on educational processes.

Now it is necessary to summarize and evaluate the difficulties that teachers, coordinators, tutors, students and parents have faced and are still facing. The transition to online training proved challenging for students and was particularly burdensome for teachers and staff involved in the management and delivery of VET. The online teaching skills and competences must be maintained and expanded.

The Survey will help us benchmark the digital skills in our partner countries (Denmark, Germany, Italy, Spain and Europe) and will provide us with knowledge of lacking skills both across and within these countries.

The questionnaire is available in five different languages: Danish, English, German, Italian, and Spanish and the

respondents come from Denmark, German, Italy, Spain and Europe. Our goal was 150 respondents. We have sent out 1016 questionnaires and have achieved a total of 308 respondents (52 Danish, 41 English, 21 German, 178 Italian, and 16 Spanish). A response rate of 30%. The statistics below are based on all respondents under each question.

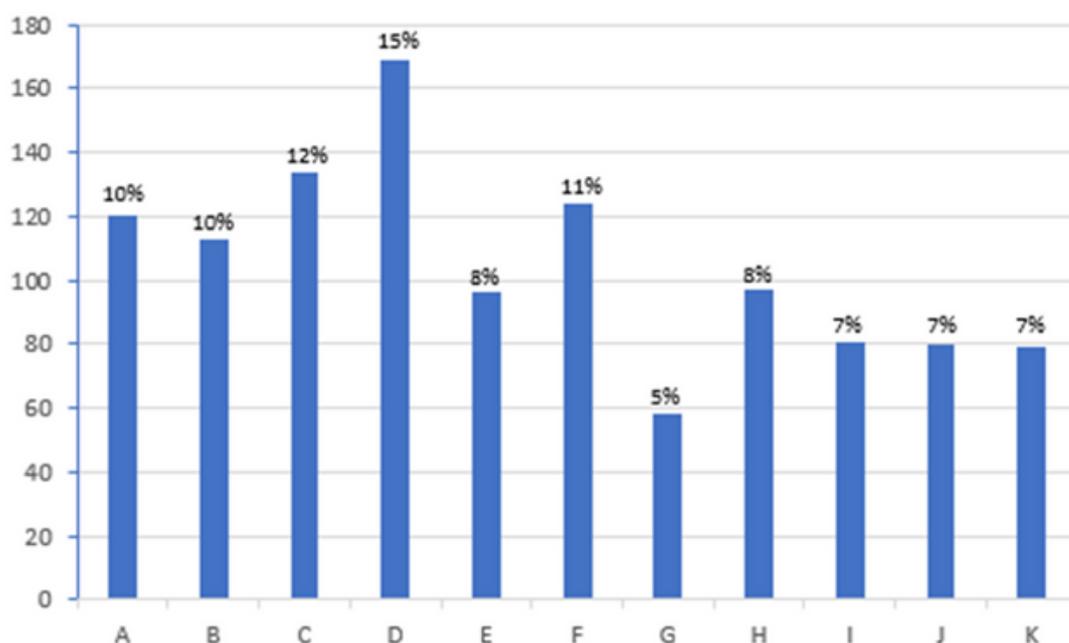


- Newcomer - little contact with digital tools and in need of guidance to expand
- Explorer - using digital tools without following a consistent approach
- Integrator - skillfully using digital tools for a range of purposes

- Expert - confidently, creatively and critically using a wide range of digital tools
- Leader - using an extensive repertoire of flexible, comprehensive and effective digital strategies
- Pioneer - questioning the adequacy of contemporary digital and pedagogical practices and leading innovation

The first graph shows how the VET employees in general describe their institution regarding digital competences. 74% perceive their institution as Integrator or above that level - 20% as explorer and 6% as newcomer.

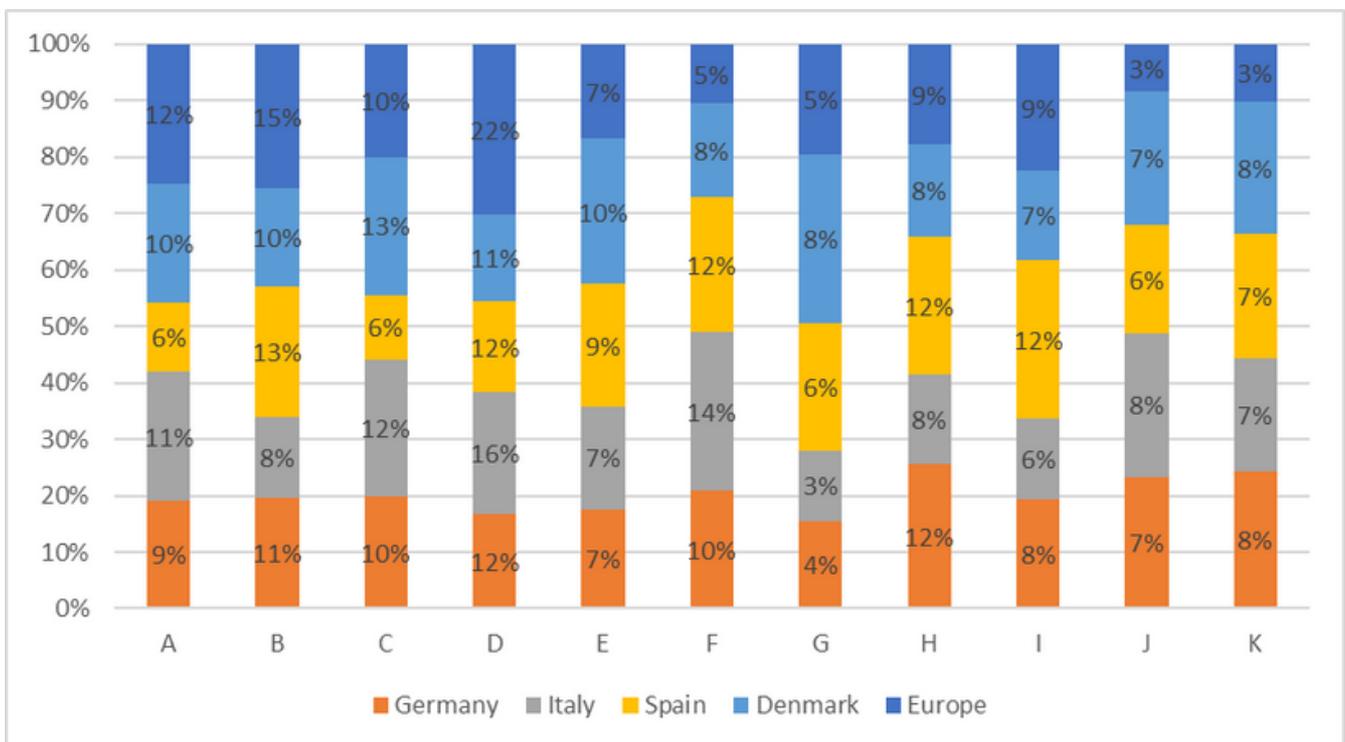
When looking at digital competences the VET institutions excel the following graph shows, that most respondents state that their VET institution excel in "D. Organizing digital content and making it available in the teaching process".



The categories are:

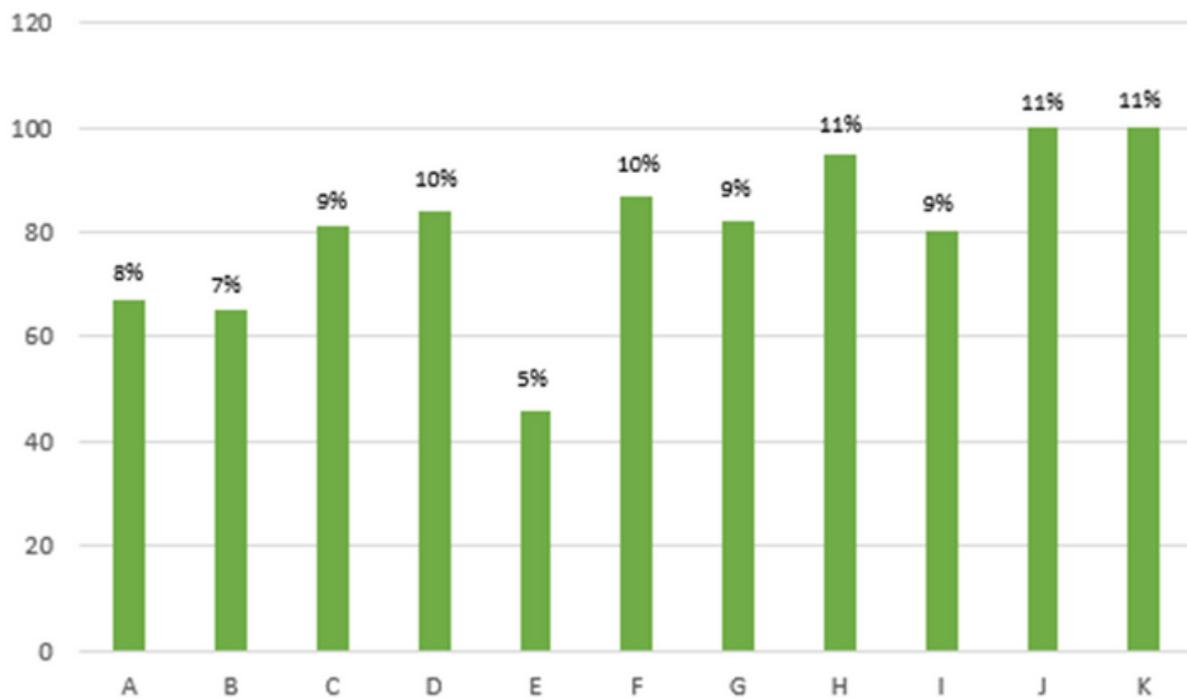
- A. Selecting digital resources and devices for teaching and learning
- B. Modifying and building on existing digital resources and devices for teaching and learning
- C. Implementing digital resources and devices in the teaching process
- D. Organizing digital content and making it available to learners
- E. Using digital technologies to provide targeted and timely feedback to learners
- F. Using digital technologies to enhance learner communication and collaboration
- G. Using digital technologies to enable learners to reflect on their own learning and share insights
- H. Using digital technologies to address learners' diverse learning needs by allowing individual learning following different levels, goals and speeds
- I. Generating digital evidence on learner activity, performance, and progress
- J. Ensuring accessibility to learning activities for learners with special needs
- K. Ensuring learners know how to manage risks and use digital technologies safely and responsibly

When breaking down the figures on partner countries, the Spanish respondents score a little higher at “B. Modifying and building on existing digital resources and devises for teaching and learning”, and in Denmark “C. Implementing digital resources and devices in the teaching process” is the highest.

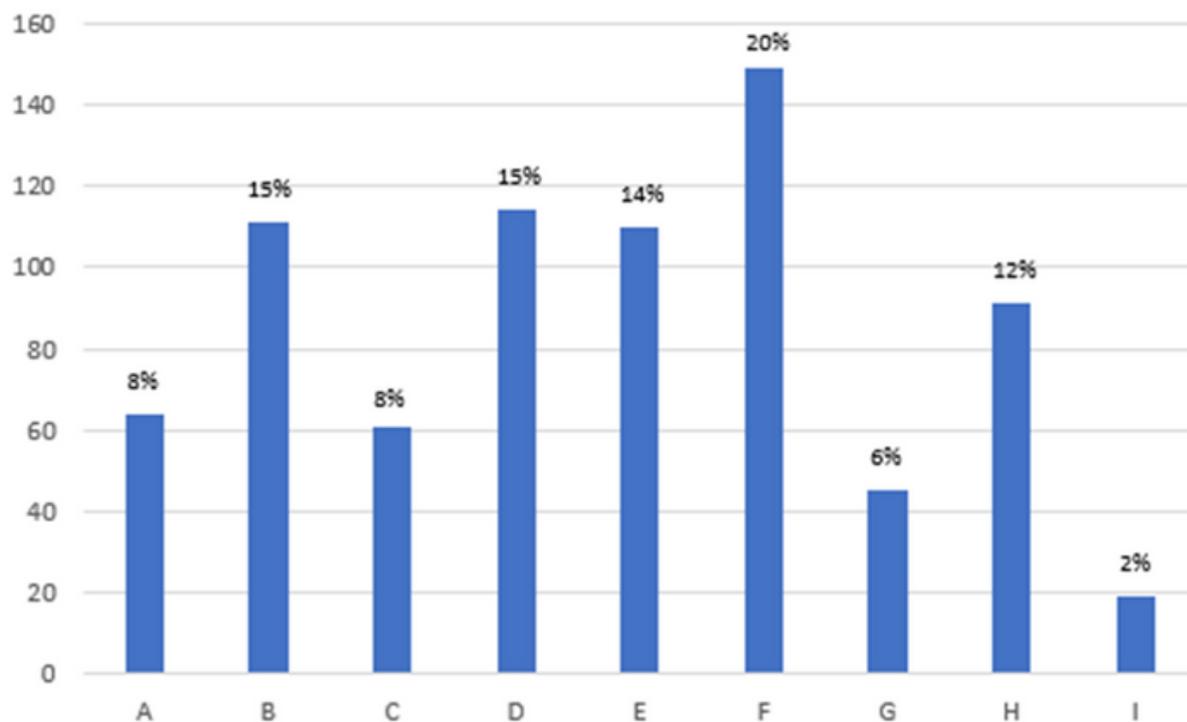


When looking at the competences that the VET institution needs to improve the most - using the same categories - the two top scorers are “J. Enduring accessibility to learning activities for learners with special needs” and “K. Ensuring learners know how to manage risks and use digital technologies safely and responsible”, closely followed by “H. Using digital technologies to address

learners' diverse learning needs by allowing individual learning following different levels, goals and speeds".



When asked which of the training topics the respondents would be interested in during the next 12 months, the most popular training is "F. Digital competences for teachers and tutors", "D. Classroom management within the virtual classroom" and "B. Effectiveness of online VET - choosing the right digital tools".



- A. Digital marketing
- B. Effectiveness of online VET - choosing the right digital tools
- C. Analysis of digital resources and understanding of digital reliability
- D. Classroom management within the virtual classroom
- E. Teamwork and collaborative digital classroom
- F. Digital competences for teachers and tutors
- G. Cost effectiveness and budgeting of digital competences
- H. Understanding and evaluating digital resources
- I. Other - Please list topics below

Of the 8 suggested topics, the project will therefore prioritize the following training sessions:

- F. Digital competences for teachers and tutors
- B. Effectiveness of online VET - choosing the right digital tools
- D. Classroom Management
- E. Teamwork and collaborative digital classroom
- H. Understanding and evaluating digital resources
- A. Digital Marketing
- C. Analysis of digital resources and understanding of digital reliability
- G. Cost effectiveness and budgeting of digital competences

Other topics were mentioned as well. In random order these topics were suggested:

- |                                 |                       |                               |
|---------------------------------|-----------------------|-------------------------------|
| • Cybersecurity                 | • Laboratory teaching | • Digital media in VET        |
| • Digital learning environments | • Excel               | • Storytelling                |
| • Personal management tools     | • Google classroom    | • Students with special needs |
| • Digital pedagogy              | • Google App          | • Autocad                     |
| • Digital tools                 | • Digital well-being  | • SQL Database query          |

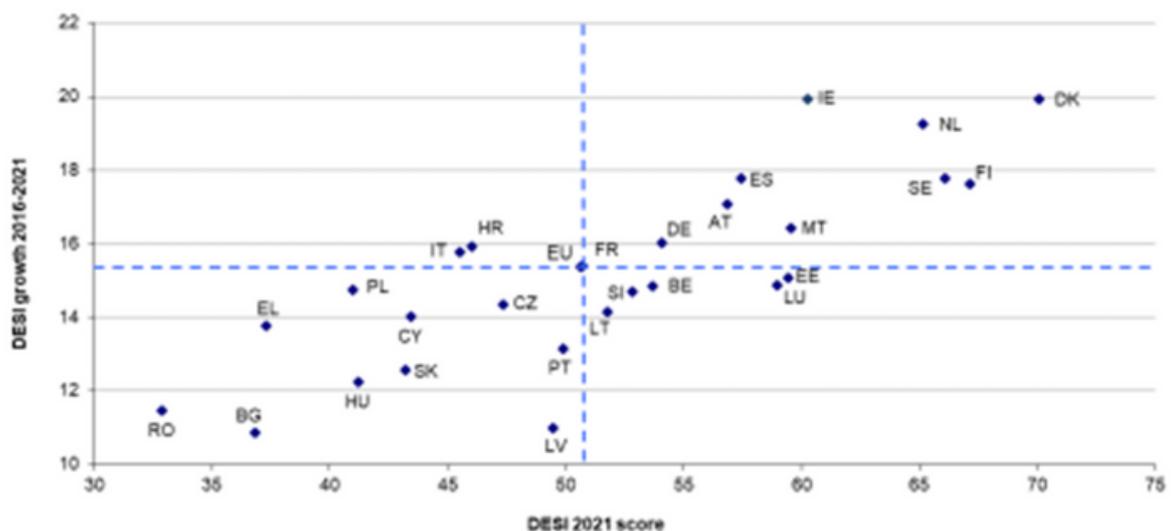
From the list above the following 3 topics will be included in the list of training sessions that will be developed in PR3:

- Cybersecurity
- Digital tools
- Students with special needs

## Desk research

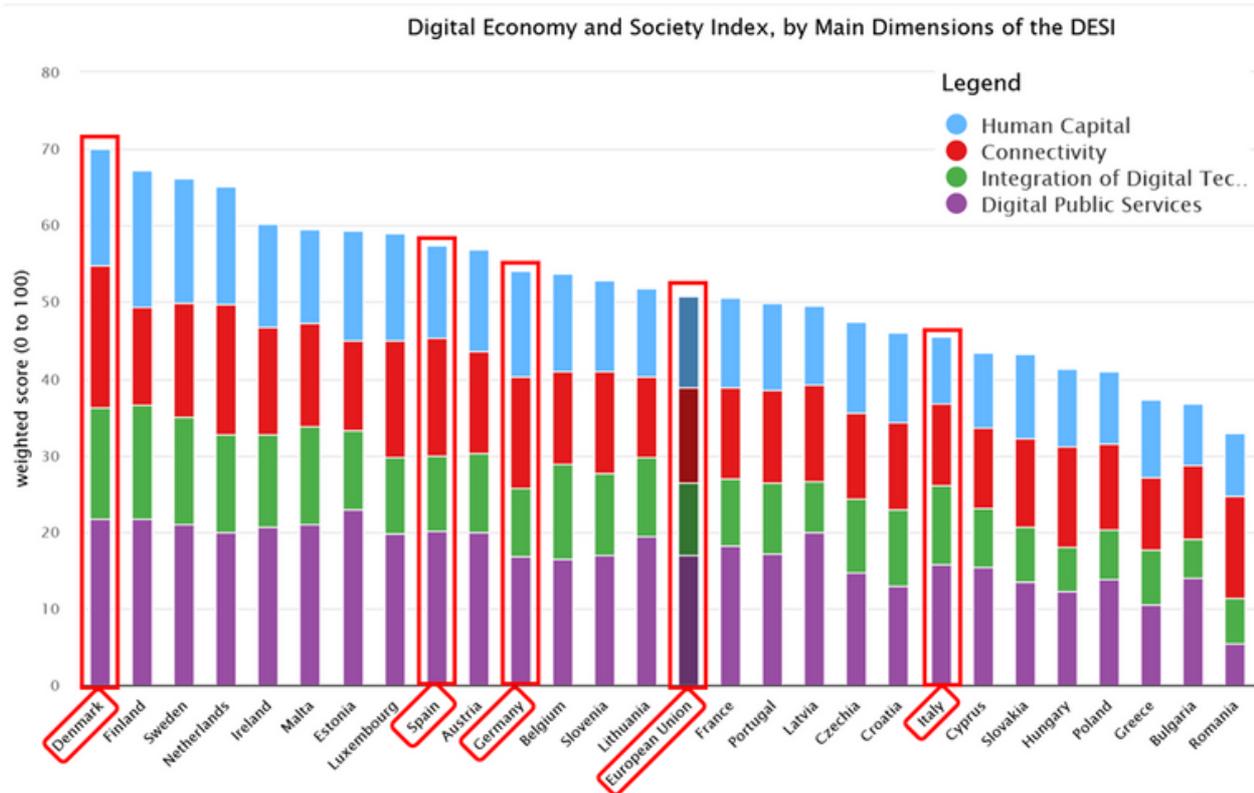
In 2020, when COVID-19 gradually spread across the world, nobody could imagine the consequences. In about a month, almost the whole world was in lockdown, forcing citizens worldwide to learn how to study, interact socially and work from home. Moreover, the boundaries of many Countries had been closed for months. The restrictive measures due to COVID-19 pandemic have forced necessary changes that have exacerbated the digital transformation as never before.

The European Commission has been monitoring Member States' digital progress through the Digital Economy and Society Index (DESI) reports since 2014. The most significant progression is noted in Ireland and Denmark, followed by the Netherlands, Spain, Sweden, and Finland.



Source: DESI 2021, European Commission.

According to the DESI 2021, these countries also perform well above the average. The figure below shows the 2021 DESI ranking of Member States. Denmark is the leader, Spain and Germany above EU level and Italy is below average.



The desk research draws on national and international studies from Europe. Each study with different focus areas. Below is a reference list of recorded materials applied from the partners desk research:

- **DESI (Europe)**

The European Commission publishes annually the results of the Digital Economy and Society Index (DESI), which shows the degree of competitiveness of Member States in terms of the Digital Economy and Society, summarizing the values of up to 44 indicators related to the dimensions of connectivity, human capital, integration of digital technology and digital public services.

<https://digital-strategy.ec.europa.eu/en/policies/desi>

- **The interagency survey on Technical and Vocational Education and Training (Europe)**

This report outlines the main challenges faced by the VET ecosystem and identifies emerging innovations implemented in different contexts to facilitate the sharing of information among VET providers. (ILO, UNESCO, World Bank, 2021).

<https://unevoc.unesco.org/home/UNEVOC+Publications/lang=en/akt=detail/qs=6439>

- **Policy Brief: Education during COVID-19 and beyond (Europe)**

According to a report published by the United Nations in 2020, the COVID-19 pandemic caused the largest disruption in educational systems in history. In just a few weeks, 1.6 billion learners all over the world started following lessons at home. The VET ecosystem, among all the other educational systems (i.e. schools and universities) struggled the most and this situation affected millions of VET students worldwide.

[https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg\\_policy\\_brief\\_covid-19\\_and\\_education\\_august\\_2020.pdf](https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/08/sg_policy_brief_covid-19_and_education_august_2020.pdf)

- **Digital gap during COVID-19 for VET learners at risk in Europe (Europe)**

According to small-scale survey based on the responses of Cedefop's ambassadors tackling early leaving from VET, there are many examples of initiatives in support of VET learners living in rural areas or having other forms of disadvantage (i.e., students from disadvantaged socioeconomic backgrounds, migrants and from ethnic minorities, learners with disabilities and special educational needs).

<https://www.cedefop.europa.eu/en/tools/vet-toolkit-tackling-early-leaving/resources/digital-gap-during-covid-19-vet-learners-risk-europe>

- **Article: Transforming how teachers use technology (Europe)**

According to Tracy Wilichowski and Cristobal Cobo, policymakers are tasked with cultivating the digital skills needed to effectively use the technology to enhance the role of teachers, incentivizing them to use these skills as part of their practice, and critically assessing when, where, how, and if these new modalities of instruction are effective and if they're not, changing course.

<https://blogs.worldbank.org/education/transforming-how-teachers-use-technology>

- **National Digital Skills Plan - Ministry of Economic Affairs and Digital Transformation of the Government of Spain 2021 (Spain)**

The document is part of the Recovery, Transformation and Resilience Plan, and provides a strategic framework aligned with the 2030 Agenda and the Sustainable Development Goals.

<https://digital-skills-jobs.europa.eu/en/actions/national-initiatives/national-strategies/spain-national-plan-digital-skills>

- **Digital skills and groups at risk of exclusion in Spain. Determinants in the context of COVID-19 - Cotec Foundation, 2021 (Spain)**

This report, prepared by the Cotec Foundation for innovation in collaboration with the Valencian Institute for Economic Research (Ivie), provides a comparative analysis of the intensity of Internet use and digital skills in Spain, and identifies the groups at greatest risk of exclusion in the digital economy and society.

<https://digital-skills-jobs.europa.eu/en/latest/opinions/closing-digital-skills-gap-spain>

- **Data Strategy of the Federal Government (Germany)**

The report includes over 240 measures to foster the innovative use of data and addresses such points as data infrastructure, use of data and data competency. This strategy is based on the European data security standards and focuses on the legal, ethical, quality and security principles (Federal Chancellery, 2021).

<https://www.bundesregierung.de/breg-en/news/data-strategy-adopted-1845882>

- **Fighting Corona Consequences, Securing Prosperity, Strengthening Future Capability (Germany)**

In relation to the Covid-19 pandemic the German government introduced the so called "Corona Recovery Plan 'Fighting Corona Consequences, Securing Prosperity, Strengthening Future Capability'" in June 2020. It includes an investment of EUR 130 billion to fight the pandemic's consequences in several areas of society, according to the DESI.

<https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Europa/DARP/deutscher-aufbau-und-resilienzplan.html>

- **Impatto della Pandemia sulle Pratiche Didattiche e Organizzative delle Scuole Italiane nell'anno scolastico 2020/2021 (Italy)**

A survey conducted by INDIRE, in the period from March to June 2021, with the aim of analyzing what were the teaching and organizational practices implemented by Italian institutes during the 2020/2021 school year, the one following the advent of the pandemic.

[https://www.edscuola.eu/wordpress/wp-content/uploads/2022/02/Didattiche-Durante-il-Lockdown\\_ricerca.pdf](https://www.edscuola.eu/wordpress/wp-content/uploads/2022/02/Didattiche-Durante-il-Lockdown_ricerca.pdf)

- **Transformation, Skills & Learnings - The Observatory Barometer 2020 (Italy)**

A survey involving 250 HR managers and 1780 employees from 4 countries (Italy, Germany, France and Spain). The aim of the survey was to understand what changes have been implemented by the vocational training ecosystem because of COVID-19 and whether these have been effective.

<https://www.cegos-channels-alliances.com/insights/transformation-skills-and-learning-european-barometer-2020>

- **Danish Ministry of Education analysis: Evaluation of commercial education (Denmark)**

The analysis highlights the differences between distance learning and traditional classroom learning. Focus is on commercial education as seven Danish VET providers currently offer 100% distance learning education and training courses.

<https://www.eva.dk/ungdomsuddannelse/evaluering-merkantile-onlineforloeb>

- **Danish Ministry of Education analysis: 7 suggestions for high quality in digital education (Denmark)**

On the basis of an interdisciplinary analysis of good practice, this analysis points to seven initiatives crucial to creating quality education organized as distance learning or blended learning.

<https://www.eva.dk/voksen-efteruddannelse/tiltag-oege-kvaliteten-digitale-laeringsforloeb>

## Summary of Survey and Desk reports

At the beginning of the pandemic, the VET ecosystem was not ready and did not have the capabilities and requirements to handle the sudden transition to distance learning. This evidence seems to be coherent across Europe, regardless the ranking on the Digital Economy Index of each Country of the RESET consortium.

Today the situation has improved but there are still some gaps to be filled. According to the survey, just 33% of respondents confirmed to have undertaken training on digital competences in the last 12 months. This percentage, to ensure greater resilience of the VET ecosystem in future post-pandemic years, must surely increase.

Each of the countries desk report includes a summary of 3-5 focus areas - skill gaps - extracted from both the survey and the desk report.

## **Europe**

With the outbreak of the pandemic the whole European VET ecosystem found itself unprepared to handle the sudden shift to distance learning. Two years later, according to the respondents of the survey, the competences to be improved the most at European level seem to be:

- Selecting digital resources and devices for teaching and learning
- Using digital technologies to enhance learner communication and collaboration
- Generating digital evidence on learner activity, performance, and progress

## **Denmark**

The desk research has uncovered both strengths and weaknesses, threats, and opportunities in terms of digital competences and digital education. The Danish analyses has discovered the following focus areas:

- Learning activities for learners with special needs
- Learners know how to manage risks and use digital technologies safely and responsibly
- Knowledge and use of DigCompEdu
- High level of dropouts in digital learning

## **Germany**

In the near future the following is needed:

- A clear strategy to use digital tools and measures in education
- Training for a raised confidence level in education personnel
- A national system to integrate digital activities and a networking base
- Better technical equipment, especially in more rural areas
- A rise in ICT experts - especially female one

## **Italy**

The following are identified as focus areas of digital competences to be improved at VET institution level:

- Using digital technologies to address learners' diverse learning needs by allowing individual learning following different levels, goals and speeds
- Ensuring accessibility to learning activities for learners with special needs
- Ensuring learners know how to manage risks and use digital technologies safely and responsibly

## **Spain**

Thanks to the survey carried out at Spanish and European level, it has been possible to find some focus areas / skills gaps for the RESET project, such as:

- Cybersecurity
- DigCompEDU + Digital skills for VET educators
- Classroom management
- Teamwork and collaborative digital class
- Effectiveness of online VET

## **Critical competences needed by VET providers**

The respondents of the survey prioritized some competence needs for the following months. Furthermore, some critical competence needs were uncovered by the desk research. Based on the survey results and the desk research studies, the following 10 critical competence needs have been identified:

## **Training title**

**Digital marketing for VET provision**

**Quality digital training for students with special needs**

**Optimizing digital VET - digital tools and resources**

**Analysis of digital resources and understanding of digital reliability**

**Classroom management: keeping the audience involved within the virtual classroom**

**Teamwork and collaborative digital classroom**

**DigComp for educators and organizations: operational implications**

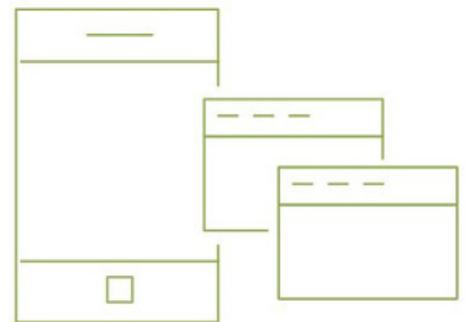
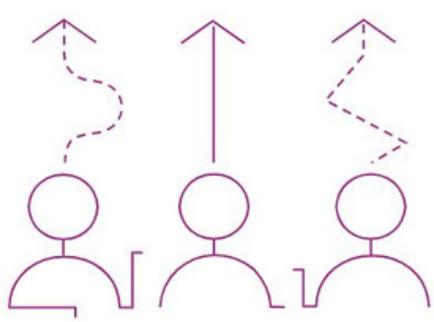
**Budgeting and resource mobilisation for digital transformation of VET organisations**

**Cybersecurity and data protection for vet operators**

**Micro-Digital Credential for VET**

Each training is connected to one - or more - DigCompEdu Area. Professional communication (n. 1 and 5), Digital Resources (n. 4), Teaching and Learning (n. 6), Assessment (n. 10), Empowering Learners: (n. 2), Facilitating Learners Digital Competences (n. 9) and transversal topics (no. 3, 7 and 8).

In PR3 the project partners will develop training courses aimed at the needs mentioned above to better support the VET providers in facing the digital transformation.



## Partners



<https://project-reset.eu>

