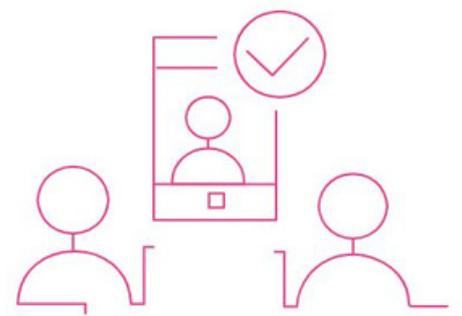
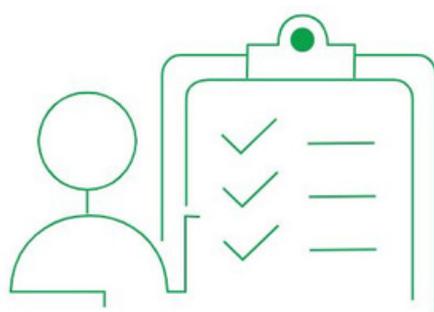


Resources for  
Post-Pandemic  
Effective Training

# Country Snapshot

## *Europe*

<https://project-reset.eu>



## A. Survey – primary level

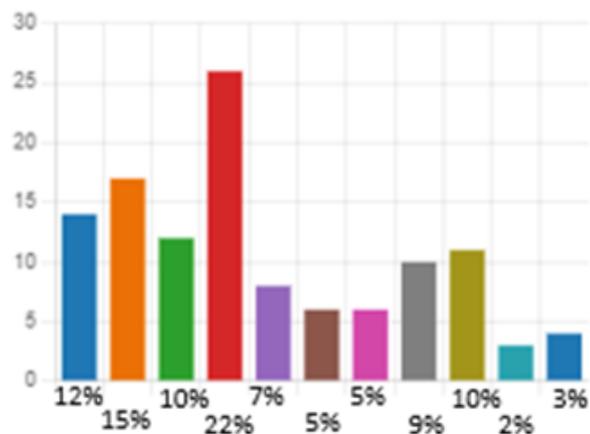
IHF carried out the survey in the period between May 2022 and June 2022, circulating the questionnaire to a total of approximated 65 direct contact as well as through its website and social media, with a total outreach of approximately 500 contacts. A total of 41 responses in English can be attributed to the primary research efforts of IHF, notwithstanding the possibility that some of the respondents from the participating countries preferred to answer the questionnaire in EN. The results of the survey in EN shows that there is a coherence between national trends and international responses. Most of the respondents would identify themselves more as integrator than expert, describing a relatively cautious sense of ease and comfort with new technologies

## Exhibit 1: Results from the survey conducted by RESET consortium

6. In your opinion, in which of the following competences does your VET institution excel? (0 point)  
Please select multiple options if relevant.

[View details](#)

- Selecting digital resources and ... 14
- Modifying and building on exist... 17
- Implementing digital resources ... 12
- Organizing digital content and ... 26
- Using digital technologies to pr... 8
- Using digital technologies to en... 6
- Using digital technologies to en... 6
- Using digital technologies to ad... 10
- Generating digital evidence on L... 11
- Ensuring accessibility to learnin... 3
- Ensuring learners know how to ... 4



Source: Survey conducted by RESET consortium

Almost half of the respondents (47%) identified “organizing digital content and making it available to all learners”, “modifying and building on existing digital resources and devices for teaching and learning” and “selecting digital resources and devices for teaching and learning” as the competences in which their organizations have a considerable expertise, while “Using digital technologies to enable learners to reflect on their own learning and share insights”, “Ensuring accessibility to learning activities for learners with special needs” and “Ensuring learners know how to manage risks and use digital technologies safely and responsibly” have been

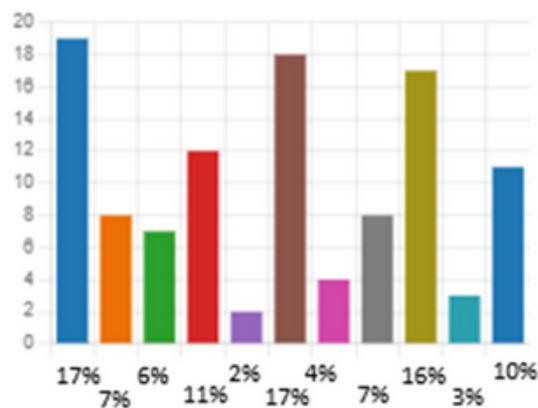
mentioned as the areas in which their organizations need to improve competences and expertise.

## Exhibit 2: Results from the survey conducted by RESET consortium

7. In your opinion, which of the following competences does your VET institution need to improve the most? (0 point)  
Please select multiple options if relevant.

[View details](#)

- Selecting digital resources and ... 19
- Modifying and building on exist... 8
- Implementing digital resources ... 7
- Organizing digital content and ... 12
- Using digital technologies to pr... 2
- Using digital technologies to en... 18
- Using digital technologies to en... 4
- Using digital technologies to ad... 8
- Generating digital evidence on L... 17
- Ensuring accessibility to learnin... 3
- Ensuring learners know how to ... 11



Source: Survey conducted by RESET consortium

In addition, 35% of the respondents identified “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” as the competences their institutions need to improve the most; while “Using digital technologies to enable learners to reflect on their own learning and share insights”, “Ensuring accessibility to learning activities for learners with special needs” and “Using digital technologies to

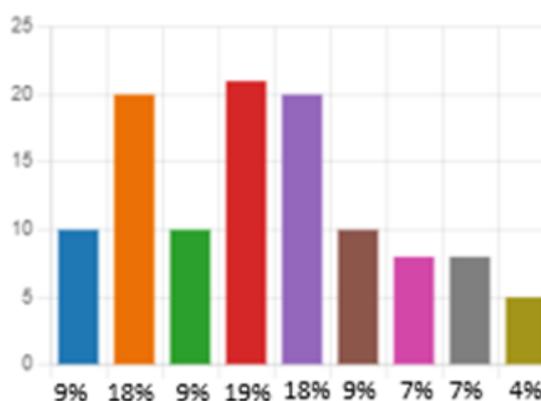
provide targeted and timely feedback to learners” as the competences their institutions do not need to improve the most.

### Exhibit 3: Results from the survey conducted by RESET consortium

10. Which of the following training topics would you be interested in during the coming 12 months? Please select multiple options if relevant. (0 point)

[View details](#)

- Digital marketing 10
- Effectiveness of online VET – ch... 20
- Analysis of digital resources and... 10
- Classroom management within ... 21
- Teamwork and collaborative dig... 20
- Digital competences for teacher... 10
- Cost effectiveness and budgetin... 8
- Understanding and evaluating d... 8
- Other - please list topics below 5



Source: Survey conducted by RESET consortium

Although areas of expertise and need have been identified, only 33% of the respondents confirmed to have undertaken training on digital competences in the last 12 months.

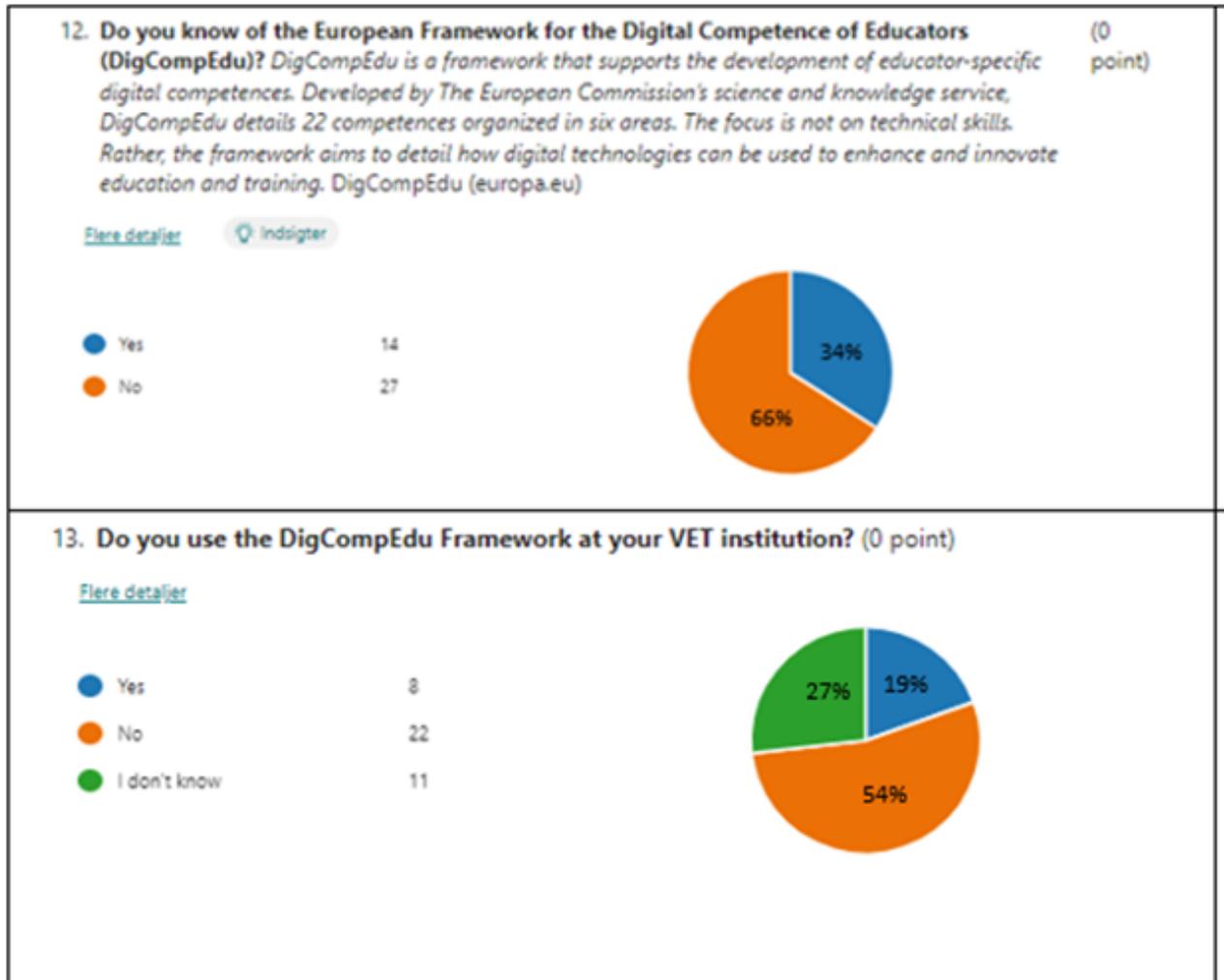
The table below provides an overview of the training topics that have been considered of interest by respondents.

## Exhibit 4: Training Topics considered most interesting by partners

Training Topic	% of Respondents
Classroom management within the virtual classroom	19%
Effectiveness of online VET – choosing the right digital tools	18%
Teamwork and collaborative digital classroom	18%
Digital Marketing	9%
Analysis of digital resources and understanding of digital reliability	9%
Digital competences for teachers and tutors	9%
Cost effectiveness and budgeting of digital competences	7%
Understanding and evaluating digital resources	7%
Other	4%

Source: Survey conducted by RESET consortium

## Exhibit 5: Results from the survey conducted by RESET consortium



Source: Survey conducted by RESET consortium

In the end, results show that the majority of the respondents do not know (66%) and use (54%) the DigCompEdu Framework. This evidence is in line with national trends.

## B. Desk research – secondary level

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 VET ecosystem, as well as other educational systems, has not been ruled out by this acceleration. However, while the secondary and higher education systems (schools & universities) reportedly have been resilient in adapting innovative pedagogy, teaching, and learning mechanisms, the VET ecosystem faced considerable challenges in this process of digital transformation.

Many factors seem to have contributed to make the challenge more difficult for VET providers, for example:

- Low ICT adoption among VET operators.
- Lack of internal capacities to organize and manage digital classrooms.

- Logistical challenges in transforming learning workshop in digital format (especially for the most vocational-oriented service provision, i.e. carpentry workshop/ cooking workshop etc...);
- Digital competencies and skills of VET teachers, trainers, coaches as well as administrative staffs.

Many recent official papers and studies confirm these challenges: the interagency survey on Technical and Vocational Education and Training (TVET) launched during the pandemic by the ILO, UNESCO and the World Bank<sup>[1]</sup>. 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).

To deal with these new circumstances, governments and professional associations have developed initiatives and solutions mainly based on information sharing between educators and trainers through the exploitation of digital platforms.

**[1]** International Labour Office, UNESCO, World Bank, Skills Development in the time of COVID-19: Taking stock of the initial responses in technical and vocational education and training, 2021

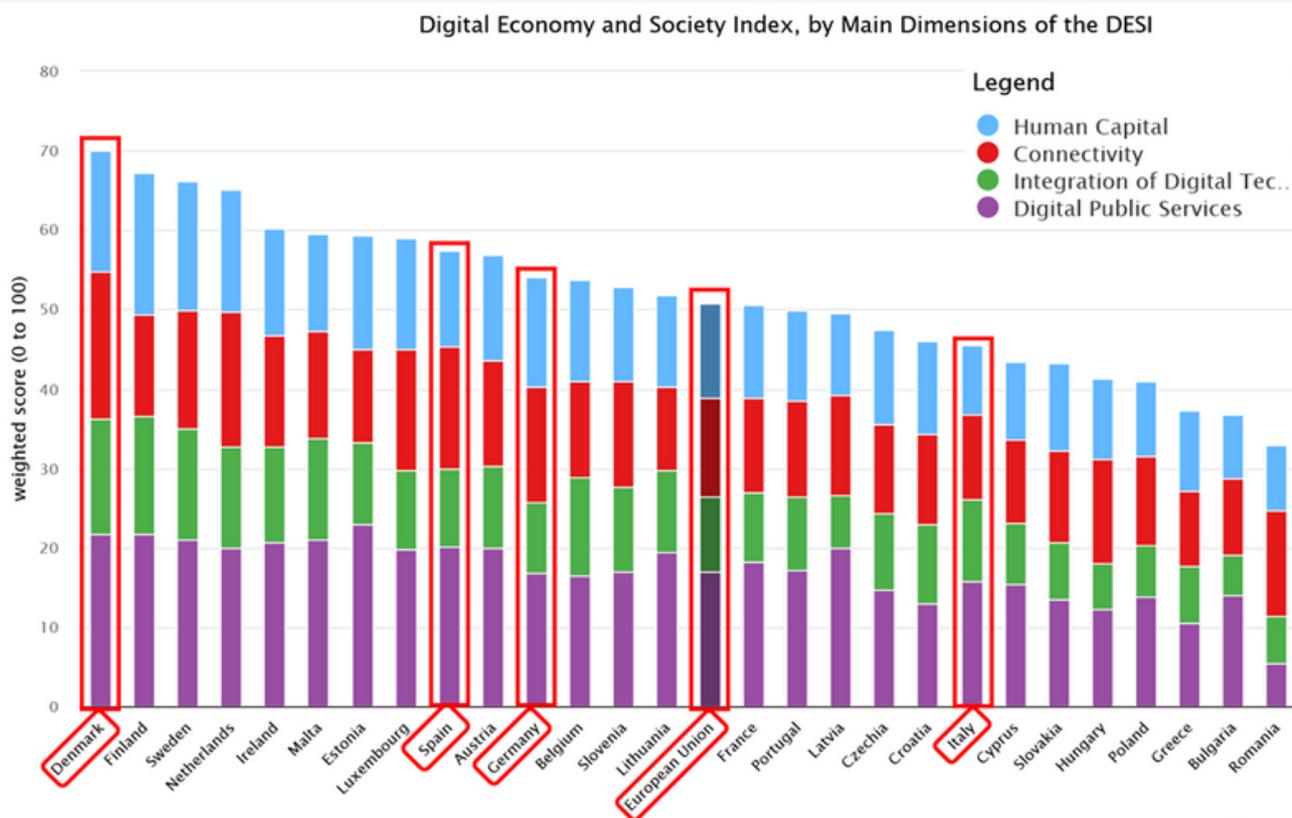
Thanks to the expertise gained over the last two years, today VET ecosystems have adapted to the use of digital-oriented tools and methodologies and students can benefit from high quality distance training courses. However, the evolutions of the COVID-19 and its variants trigger considerable uncertainty for the future.

In many ways, COVID-19 variations undermine the continuity in the provision of educational and training services with the increased challenges of geographical disparities. Indeed, European Member States have taken various restrictive measures and managed vaccination campaigns differently, for this reason COVID-19 has had (and continues to have) different impacts on VET ecosystem in different Member States.

The different paces and depths of the digital transformation in VET systems of EU Member States that emerged from the pandemic are yet another representation of the gaps in the domain of digital adoption among European economies and societies. Exhibit 1 below depicts the ranking among the Member States according to the Digital Economy and Society Index (DESI) of the European Commission.

The DESI is a composite index comprising different indicators to capture the digital performance among Member States along five main dimensions: 1) Connectivity; 2) Human Capital; 3) Use of Internet; 4) Integration of Digital Technology; and 5) Digital Public Services.

## Exhibit 1. Digital Economy and Society Index for All Member States, 2021

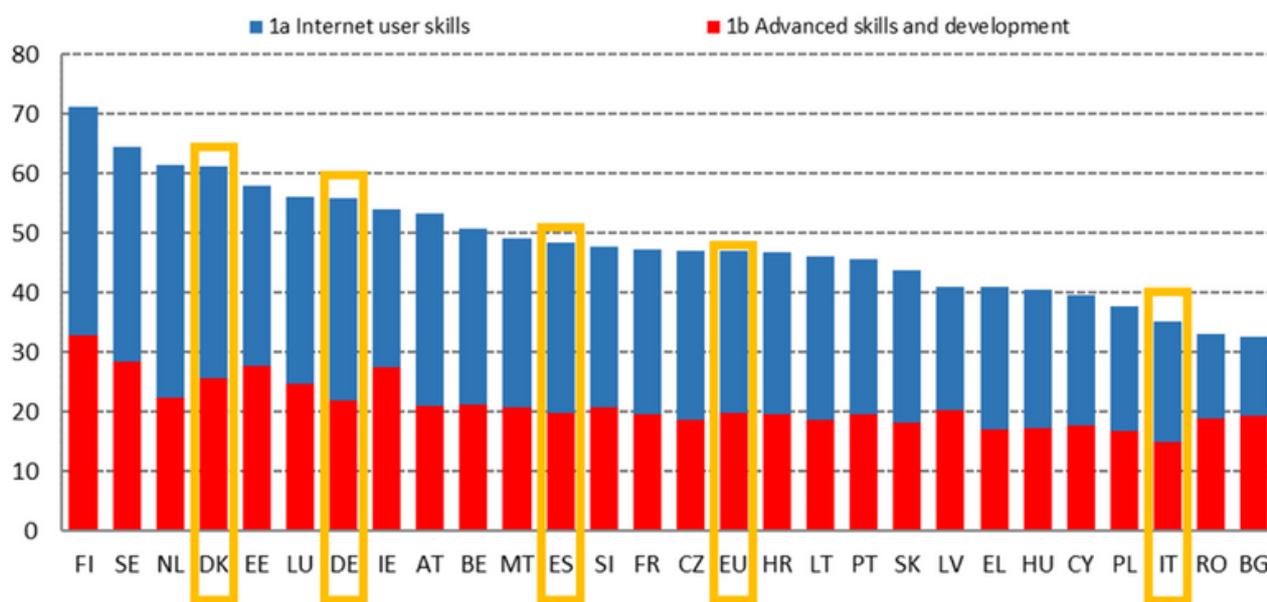


Source: European Commission, DESI, 2021

Exhibit 1 above provides an interesting overview of the DESI and relative divide among the Member States in aggregate and by main dimensions. It highlights the Member States represented by the participating organisations in the RESET Project that represents the leader (Denmark), a group of countries above EU average (Spain and Germany) and a laggard (Italy).

Noteworthy is the distance between Member States in the domain of human capital that represents a key element of the RESET project for the digital competences of the VET operators and their teaching and non-teaching staff members. Exhibit 2 below depicts the trend and evolution of the human capital dimension in the countries represented by the RESET Project partners and the EU average.

## Exhibit 2. Human Capital Dimension in DESI for Selected MSs and EU, 2016-21



Source: European Commission, DESI, 2021

The Exhibit 2 above shows a relatively unbalanced distribution of the RESET participating countries along the human capital dimension, with only Italy lagging behind in the group. Denmark, Germany and Spain are all above EU averages when it comes to both internet user skills and advanced skills and development. Italy is the only country of the lot to lag behind EU average, and sensibly so.

The dimension of human capital within the DESI remains the difficult one to tackle, precisely because it relates to skills and competences that, even if acquired in a short period of time, require medium-term perspective to yield benefit and impact at systemic level. Precisely to provide guidance and a reference for the human capital dimension, the EU Commission has launched many initiatives pertaining to digital skills for digital jobs, the enhancement of digital competences among society at large. In this context, the DigCompEdu plays a pivotal role in accompanying the VET systems across Europe to facilitate the process of digital transformation.

The RESET partners commit to monitoring the trends in the human capital dimension of the DESI throughout implementation to gauge the evolutions and measure the impact of national and European initiatives and policies.

In this context, this report analyses the challenges faced by the VET ecosystem at the onset of the pandemic, to then identify measures, policies and initiatives undertaken in various Member States to sustain the resilience and relevance of VET systems.

The last section of the report corroborates the findings and integrates the results of the analysis of documents with the results of a questionnaire-based survey that involved more than 300 responses from VET practitioners on the digital dimension of VET provision during the pandemic.

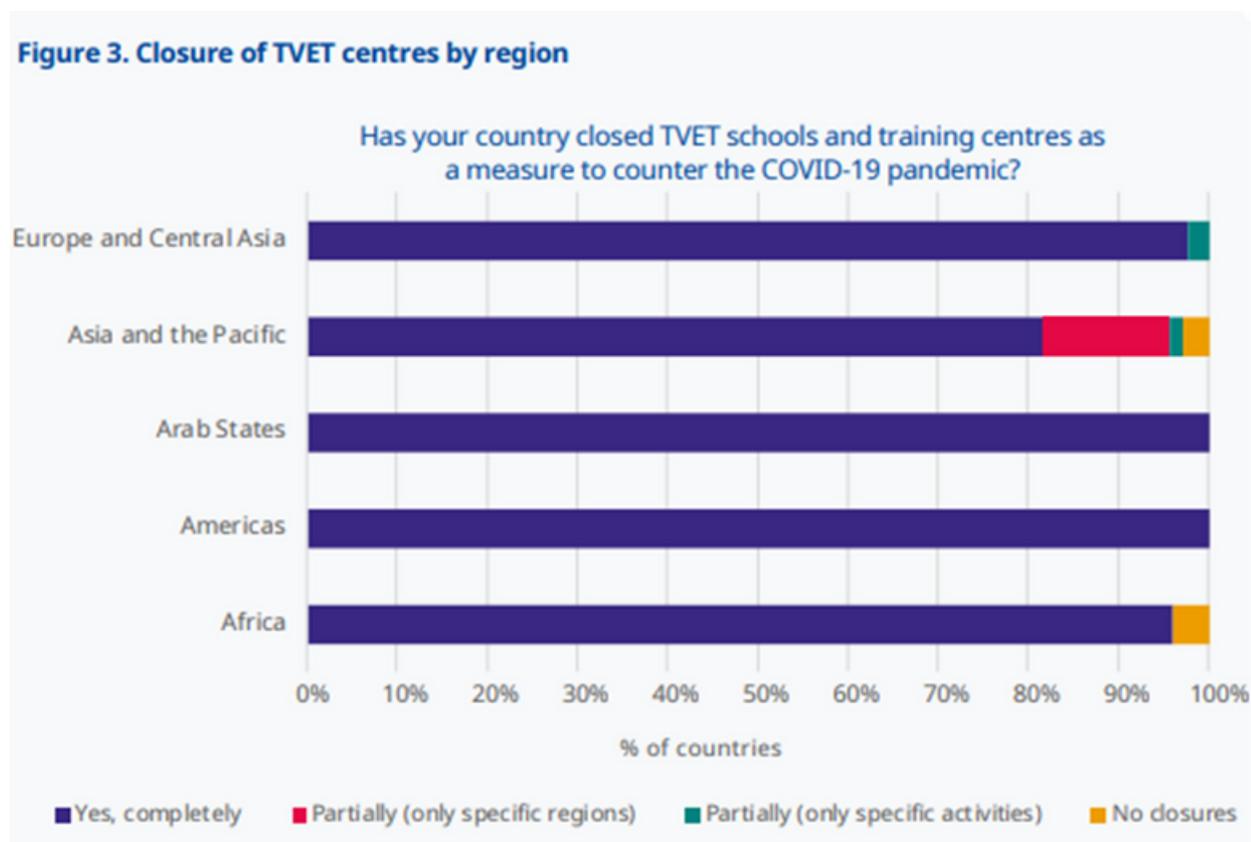
## Challenges and Opportunities during the COVID-19 pandemic.

According to a report published by the United Nations in 2020[2], 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.

The box below shows the percentage of VET providers that had to interrupt their services partially or totally during the pandemic.

[2] United Nation, Education during COVID-19 and beyond, 2020

### Exhibit 3. Closure of TVET centres by region.



Source: ILO, UNESCO & The World Bank, 2021.

The three international organisations ILO, UNESCO and The World Bank launched an online survey in 2020 to investigate the main challenges the VET ecosystem (especially TVET providers, policymakers, and social partners) faced when the pandemic broke out and most of VET providers had to close (as seen in the previous box).

The survey, which collected data from 1,353 respondents, representing 126 countries from all over the world captured the main challenges faced by TVET institutions during this crisis and brought to light innovations in teaching and learning. One of the topics of the survey was the transition to alternative modes of training and assessment in a digital setting. Reportedly, before the COVID-19 pandemic, most VET providers did not use distance learning: before 2020, more than a third of respondents (TVET providers) had never used remote learning for courses or training, and another third had only used it sporadically. Around 18% utilized it on a regular basis, and just 12% used it frequently.

**Table 1. Use of Distance Learning before COVID-19**

<b>Use of Distance Learning</b>	<b>%</b>
No use	More than 40%
Sporadic use	40%
Regular use	18
Frequent use	12

Source: Own elaboration based on ILO, etc..

During the pandemic, forced by the circumstances, the uptake of distance learning methodologies inside the whole VET ecosystem increased drastically: 46 out of 92 countries reported providing courses that were exclusively based on remote learning, while 15% of TVET providers in the survey said they did not offer online or offline distance learning at the time of the survey; 66% said they provided instruction entirely online; approximately 12% of TVET providers said that training was delivered partially remotely and partially face-to-face.

According to this report the main challenges of this fast shift were:

1. Lack of general and technological infrastructure: one of the main challenges of moving quickly to distance learning were: lack of stable access to electricity, internet connection and devices. This caused a gap between urban and rural areas, penalising people living in the latter.
2. Lack of effective and user-friendly distance learning platforms: the proper functioning of the platforms used for distance learning strongly impacts the quality and efficiency of distance learning.

At the beginning of the pandemic, VET ecosystem was not ready to deliver courses online; so, the quality of the pedagogical resources, and consequently the effectiveness of learning, suffered a lot.

3. Lack of staff capacity to support distance learning through quality pedagogical resources: most respondents attributed the cause of lacking readiness of both VET teachers and learners to adopt distance learning tools effectively to a lack of digital skills. Quoting OECD: in several Countries, the teaching workforce has aged over the last five to ten years, with a few examples of significant age increases between 2013 and 2018. Those Countries will face the challenge of attracting and preparing large numbers of new teachers in the coming years. (2018)

4. Financial resource constraints: due to the withdrawal of many students (most of the time because their parents could no longer afford to pay fees), the VET ecosystem struggled to find the funds to improve and make distance learning more effective.

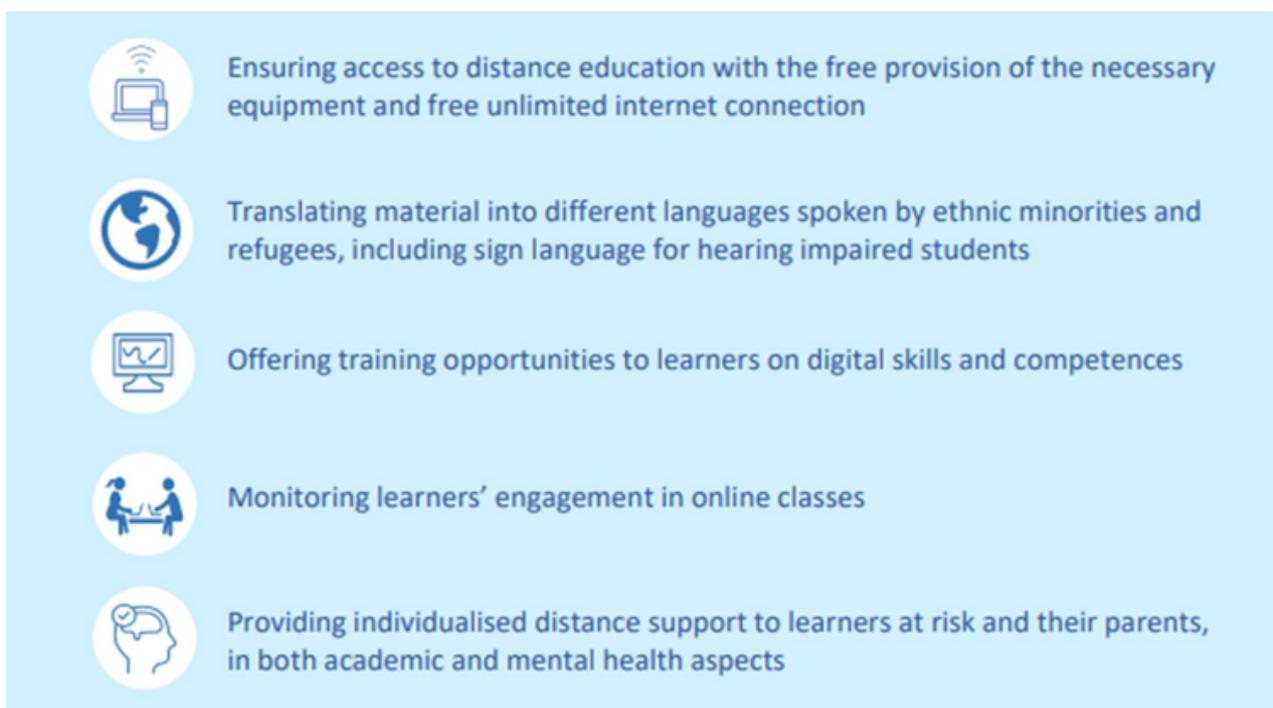
Over the past two years, governments and professional associations have established many initiatives to deal with these challenges. In the following section, starting from some of the issues mentioned above, we will discuss about the solutions found.

# How to deal with the problem of lacking infrastructure penalizing VET learners and teachers who live in rural areas?

According to small-scale survey based on the responses of Cedefop's ambassadors[1] 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). The following box shows the main solutions.

[1] CEDEFOP, Digital Gap during COVID-19 for VET learners at risk in Europe, 2020

## Exhibit 4: Initiatives established by governments of EU Member States to deal with the problem of lacking of adequate infrastructures.



The infographic consists of five vertically stacked items, each with a circular icon on the left and a text description on the right. The background is a light blue gradient.

-  Ensuring access to distance education with the free provision of the necessary equipment and free unlimited internet connection
-  Translating material into different languages spoken by ethnic minorities and refugees, including sign language for hearing impaired students
-  Offering training opportunities to learners on digital skills and competences
-  Monitoring learners' engagement in online classes
-  Providing individualised distance support to learners at risk and their parents, in both academic and mental health aspects

Source: CEDEFOP, 2020.

## How to deal with the problem of lacking effective and user-friendly distance learning platforms?

To facilitate the sharing of information among VET providers, in many European Member States many platforms were set up during the pandemic to keep trainers in touch and let them exchange useful tips on how to make distance learning more effective for learners. For example, the Croatian Agency for VET and Adult Education has launched a portal, inviting VET teachers, companies, and other stakeholders to create and exchange digital educational materials relating to vocational courses. Moreover, to increase connectivity and improve communication between teachers and trainers, social media also played an important role. In some Member States, governments developed YouTube channels for students to follow general or VET lessons, other countries preferred learning platform like Moodle. For instance, in Ireland, the country's online eCollege has been made free of charge to help both persons who are already enrolled in a Further Education and Training programme and those who have recently lost their

jobs or had their hours reduced and want to upskill or reskill in digital competence. eCollege offers online courses in computer programming, data science, and web and graphic design, as well as tutoring and self-study options. (European Commission, 2020)

## How to deal with the problem of lacking staff capacity to support distance learning through quality pedagogical resources?

Even before the pandemic, the educational sector was aware of the disruptive potential of ICTs for teaching and learning. However, enthusiasm about the use of technology was already very fragmented among teachers and trainers[4]. As common with the advent of new technologies and models, there is enthusiasm of early adopters as well as resistance to change.

A factor behind possible resistance to change could be the generational divide between teachers and learners: in most cases, teachers are over 40 years of age (digital migrants) who find it more difficult to adapt new technologies.

[4] World Bank Blog, Transforming how teachers use technology, 2021

This is a problem because if teachers and trainers do not understand how to use new technologies, they would always be reticent about its effectiveness for learning. Therefore, according to Tracy Wilichowski and Cristobal Cobo[1], 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. (World Bank Blog, 2021). However, to develop these skills, it is important to provide teachers and trainers with supportive factors that can help them to adopt effectively new technologies.

In the same article, the authors propose four different ways to reach this goal (2021):

- Master ideas, not keystrokes
  - The ability of teachers and trainers to use new technologies effectively during teaching depends on a proper balance between digital and pedagogical skills. This is the reason why, there is still a global shift in how instructor use technology, despite broad efforts

- to define and foster these abilities. The key is not to totalize the focus on how teachers should use ICTs, but to develop policies that cultivate deeper change and make them realize the potential of integrating new technologies into teaching methods.
- Transform the software and the mindware
  - Data demonstrates many teachers dislike technology because of the professional training they receive on that subject. As a result, changing teachers' perceptions on technology use is required not just to gain access to technology and training, but also to guarantee that it is integrated into their daily practice over time. These efforts should be driven especially by bottom-up initiatives, such as communities of practice and other teacher network projects.
- Design user-centred solutions
  - In order to understand how teachers and learners use technologies, firstly policymakers need to collect information about the context in which they use them. This means not only measuring teacher's digital skills, but especially understanding which are the structural problems and concerns they face while

- adopting ICT. Based on this data, policy makers must determine which problems can be addressed by public policy instruments and whether technology should be included in the solution.
- Better data for better decision
  - To better understand the difficulties in integrating new technologies, policymakers should always consult teachers and trainers to receive feedbacks about the effectiveness of action taken. There are many assessments that policymakers can use, like for example Mentoring Technology-Enhanced Pedagogy Self-Assessment tool, Mydigiskills, Digital Competence Wheel, Tests Pix.

Those discussed are just some of the challenges faced by the VET ecosystem during the pandemic. A further important aspect to highlight concerns the difficulties that VET providers had in delivering mainly practical skills courses for example, a literature course involves completely different types of teaching than a pastry course. Practical skills are frequently developed through hands-on experience in work situations or through learning-by-doing in school-based workshops and laboratories.

When practical activities need the use of equipment or materials that are often not found at home, remote learning approaches are a poor substitute, unless the exercise can be reproduced remotely via, for example, virtual or augmented reality experiences. Assuming that vocational education and training is primarily based on the acquisition of practical and manual skills, it is easy to understand why distance learning in this context has proven to be less effective than in other education systems (i.e., schools and universities).

The need to investigate how to better integrate the use of new technologies in the delivery of purely practical courses, typical of VET, had already become evident after the European Commission's dissemination of SELFIE, a tool that supports schools during the digital learning transition process. Through a series of questions posed to school leaders, teachers and students, SELFIE is able to identify which areas need to be strengthened and on the basis of the results obtained, schools can implement a targeted action plan to solve that specific gap. As the first version of the tool did not take into account the fact that VET schools offered mainly work-based learning, research was carried out in 2019 to investigate within the

context of the reference context how necessary it was to create a tool that took this into account. The results of the study indicated a strong need to develop a SELFIE for WBL extension. (SELFIE for WBL, E.C, 2021)

Another important challenge faced by teachers and trainers during the lockdown was to keep students' interest and participation high during the lessons. From home, in front of a screen, in fact, staying focused for many learners has been much more difficult than being in the classroom. To motivate students and make the most of the available technologies, some teachers found more active and participative teaching methods such as focus groups, digital storytelling, and gamification more effective.

The above overview shows that, despite the many difficulties faced by VET providers due to the pandemic outbreak, the initiatives and solutions proposed at both local and European level have contributed to making the entire ecosystem more resilient. Having had to adapt, in a relatively short time, VET providers have improved the quality of their online courses, making distance learning of purely practical skills more effective. In a long-term perspective, this

is an excellent opportunity to promote lifelong learning, of which the entire VET ecosystem is a promoter. Indeed, it is much easier for a worker to follow a distance learning course than to have to go to the classroom every day.

## Best Practices

### 1. Greece

To facilitate the delivery of courses during the pandemic, the Greek Ministry of Education promoted several initiatives based mainly on the implementation of distance education platforms and specific software, accessible by both upper secondary vocational schools and public vocational training institutions. For instance, the percentage of courses delivered virtually has reached 97 per cent in public secondary/non-tertiary VET (IEK). The strategy adopted by the Greek Ministry was essentially based on three pillars:

- Synchronous teaching methods. To do this, the Webex platform was mainly used.
- Non-synchronous teaching methods. For example, after the lessons, in order to encourage self-study by each student, it was common

- for teachers to share teaching materials (i.e., Ebook61, digital seminars etc.) on platforms that could be consulted h24/7 by everybody (i.e., Moodle, e-me64 and e-class etc.)
- Free and unlimited Internet access for all students.

In addition, to support disadvantaged students, municipalities purchased the electronic equipment they needed to study from home or encouraged private lending of such equipment. With regard to the support measures put in place for teachers, on the other hand, daily online training sessions were organized to introduce the synchronous and asynchronous teaching methods promoted. Interesting to mention is the online course "Staying at home with eTwinning" offered by the Hellenic Support Service to train teachers in the use of online teaching models.

## 2. Denmark

In Denmark, the Ministry has offered free advice and tools to help school leaders adequately manage emergency education and distance learning during the pandemic. In addition, together with the Vocational Education and Training Institutes, it collected

several Best Practices on the use of digital platforms that can help improve teaching. Teachers were able to access several centralized ICT resources, such as the classroom platform (used in all public schools), Lectio, Ludus or other platforms (used in upper secondary schools), to send teaching materials and assign homework to students. Finally, teachers were able to receive online support during lesson delivery from both the public and private sectors, and multiple publishers of teaching materials made their content free of charge and available online during school closures.

### **3. Romania**

The Romanian Ministry, on the other hand, made online platforms available to teachers free of charge throughout the lockdown period to facilitate distance learning. The main tools used were Google Classroom, Google Meet, Google Hangouts, Zoom, Microsoft Teams, Livresq, Webex Meetings, Windows 10 and the Office 365, Skype and WhatsApp applications. The Ministry of Education also launched a series of educational TV programmes using the national TV provider.

#### **4. Croatia**

With the objective of offering support and not taking over the role of VET instructors, the Croatian Ministry opened a learning portal with the aim of collecting useful material for all VET professionals. The process was modelled and managed by AVETAE, which proceeded with the creation of the online portal, which became operational on 12 March 2020. This portal covers 13 VET sectors and contains cross-cutting and common topics. In this context, work-based learning (WBL) was a major challenge, so the Agency appealed to all VET schools, but also to chambers of commerce and employers' associations, to send in their digital content for publication.

#### **Exhibit 4. CEGOS Observatory Barometer 2020.**

##### **In- depth study: How COVID-19 impacted VET at corporate level.**

The CEGOS Observatory Barometer 2020[1] sheds light onto the challenges emerging from the pandemic in the domain of Professional Education and Training provided in the world of work, i.e. corporate training and upskilling of the workforce.

This report is based on a survey carried out in 2020 that involved 250 HR and 1780 employees from 4 countries (Italy, France, Germany, and Spain).

The Barometer 2020 provides useful insight on the trends of:

- Technological evolution and impact on HR and employees.
- COVID-19 effects.
- Key Competences for the future.
- Development of strategic competencies for the future.

The obtained results at European level show that:

- 91% of HR managers and 84% of employees believe that digital transformation necessary requires the development of new skills among the workforce and the best methods to achieve this goal are: upskilling; recruiting and reskilling.
- 89% of HR managers claims to have had to readjust their teaching methods, although 29% of employees believe that this adjustment has not occurred. However, 64% of employees claim to have taken an online course during the isolation period and 95% were satisfied with it.

- Both HR managers (81%) and employees (80%) say they are aware of the upcoming changes in their jobs and know how to find appropriate upskilling and reskilling solutions.
- 43% of HR managers and 62% of employees believe that competence development should be a shared responsibility between company and employees. However, 45% of the latter claim that they are not willing to make a financial contribution.

Source: Cegos, Transformation, Skills & Learning, 2020

## Conclusion

Despite the pandemic caused the largest disruption the VET ecosystem has ever faced, not all ills have come to harm. Before the pandemic, reportedly[7], hardly any VET providers had used and knew how to use distance learning effectively. Thanks to the initiatives set up by European governments and professional associations to help the whole VET ecosystem to deal with the challenges caused by the pandemic, VET providers have become familiar with the tools and dynamics of distance learning, both synchronous and asynchronous, and with the main online platforms used, such as Webex, Google Meet, Zoom etc. Reducing VET providers digital skills gap offered many opportunities to the entire sector, not only because today even experts do not yet know how the pandemic situation will evolve soon, but also because it offers better opportunities to promote the lifelong learning that can help people to achieve fulfilment and satisfaction. For a working student, in fact, it is much more convenient to take a distance learning course than to travel several times a week to the classroom. For this reason, continuing to promote and improve the digitalization of the VET ecosystem is of paramount importance.

[7] United Nation, Education during COVID-19 and beyond, 2020

## C. Partners' digital competences and needs

### Partners' own experience with digital learning

Since the onset of COVID-19 and related restrictive measures, IHF had to cancel all the face-to-face training provision in its Brussels office. This meant a complete halt to the delivery of training

On specific request from clients and partners, IHF developed fully-digital training courses, and to do that it had to:

1. revise completely the structure of the training courses
2. review the content and amend the content for smooth delivery in on-line only settings
3. implement innovative classroom management techniques
4. learn the use and adoption of ICT tools for efficient delivery of digital training and management of digital classroom, specifically ICT tools and apps to manage information (cloud systems), manage classroom (teams / zoom / etc.), manage content (polling and testing applications and softwares)

All in all, the switch to digital also entailed investment in hardware and software that were not foreseen (i.e. purchase of cloud space, purchase of software, subscription to ZOOM, specific hardware, cybersecurity systems). The classes have been remodelled completely: maximum duration 40 minutes, with breaks of at least 15 minutes, developed new techniques to engage learners, in particular to make sure that they come back to the digital class after breaks (this also entailed structuring the delivery in a way that the most interesting topics were presented before the break, but delivered in detail after the break)

## **Reflection on desk research**

During COVID-19 pandemic, ICT was essential to ensure the continuity of learning both in the secondary and higher education system and in vocational and educational training. As mentioned before, the first one has been resilient in adapting innovative pedagogy, teaching, and learning mechanisms; while the second one faced several challenges in this process of digital transition, like for example:

- Low ICT adoption among VET operators.
- Lack of internal capacities to organize and manage digital classrooms.
- Logistical challenges in transforming learning workshop in digital format (especially for the most vocational-oriented service provision, i.e. carpentry workshop/ cooking workshop etc...);
- Digital competencies and skills of VET teachers, trainers, coaches as well as administrative staffs.

However, over the last two years and thanks to the support received, the whole VET ecosystem proved to be resilient, and VET providers implemented different solutions to guarantee a high-quality distance learning to all students.

Here's a schematic example of Best Practice adopted in different European Member States.

## Exhibit 5: Best Practice in EU

### Best Practice in EU:



- Synchronous Teaching Methods: implementation of distance education platforms i.e. Webex
- Asynchronous Teaching Method: sharing of material on platforms (i.e. Moodle), searchable h24/7.
- Free and unlimited Internet access for all students.



Teachers were able to access several centralized ICT resources, such as the classroom platform (used in all public schools), Lectio, Ludus or other platforms (used in upper secondary schools), to send teaching materials and assign homework to students.



The Romanian Ministry provided online platforms available to teachers free of charge ( i.e. Google Classroom, Google Meet, Google Hangouts). Moreover, it launched a series of educational TV programmes using the national TV provider.

*Source: Own elaboration*

## Reflection on Survey Results

What emerged from the desk research is in line with the survey results carried out by the RESET consortium: 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 (IT; DE; DK; ES).

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, in order to ensure greater resilience of the VET ecosystem in future post-pandemic years, must surely increase.

## **The use and spread of DigCompEdu**

On the basis of what emerged from the survey, there is a general lack of awareness of DigCompEdu among the consortium Countries: 66% of the respondents do not even know what it is and more than 50% of VET operators state that they do not use it within their institutions.

What emerged from the survey is in line with the general lack of official data and reports on the level of knowledge and dissemination of DigCompEdu that emerged during the desk research at European level.

## D. Summary

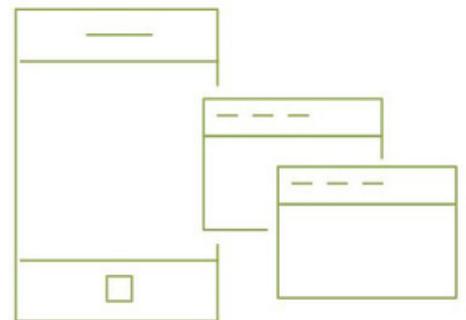
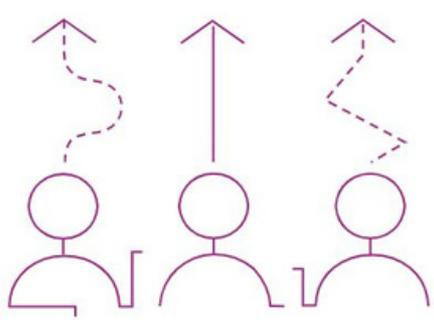
The results of the survey underlined that there is homogeneity among VET operators at European level regarding the digital skills possessed and the level of digitisation of the services offered.

With the outbreak of the pandemic, apart from the ranking of each European Country in DESI, 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.**

These findings are in line with what emerged from the desk research: at the beginning of the pandemic the VET ecosystem was not ready to handle this unexpected event and had more difficulty in adapting innovative pedagogy, teaching, and learning mechanisms compared to other educational systems (i.e. School and Higher Education). However, thanks to the financial and organisational support received also at the institutional level, the VET ecosystem has been able to adapt. In the end, continuing to reduce the digital skills gap of the VET ecosystem offer a lot of opportunities like for example a better promotion of lifelong learning.



## Partners



<https://project-reset.eu>

