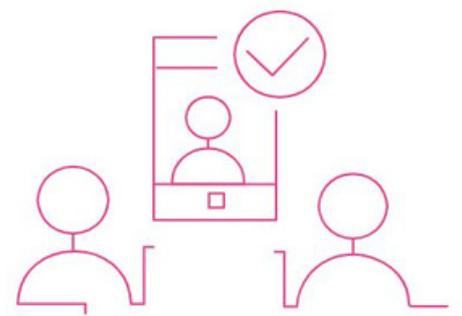
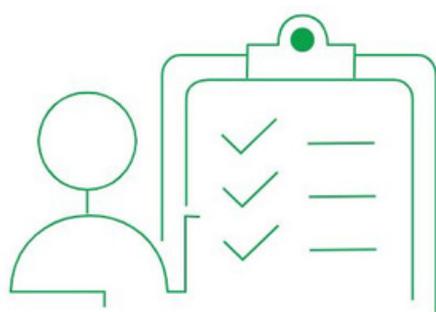


Resources for
Post-Pandemic
Effective Training

Country Snapshot

Spain

<https://project-reset.eu>



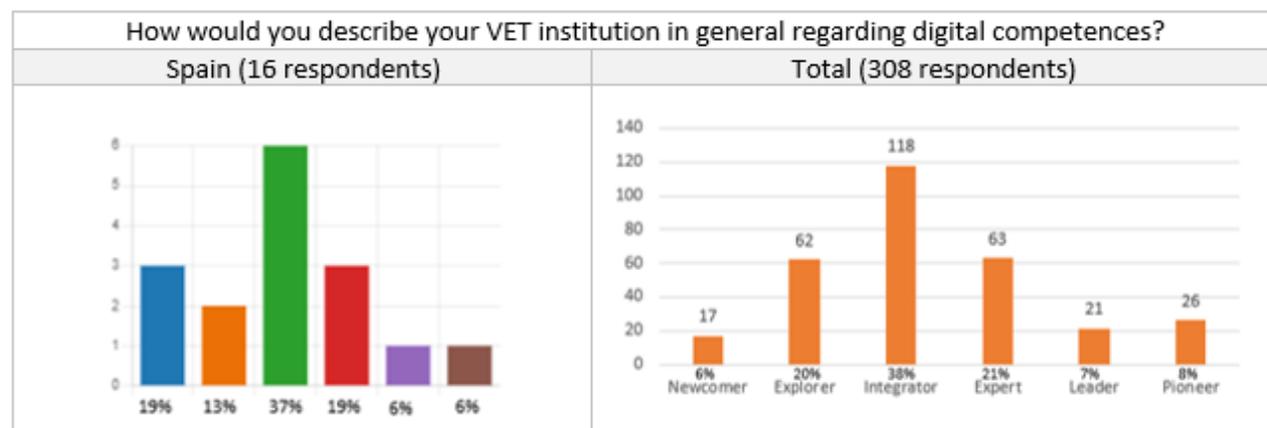
A. Survey – primary level

Firstly, in this section, we present the results of the survey of a total of 308 respondents from VET institutions at a European level, of which 16 belong to Spain. Regarding the profile of the respondents, 85% of the institutions surveyed in total offer online education (56% of the Spanish respondents), and 36% of the total had provided online education to their VET learners before COVID-19 (12% of the Spanish respondents).

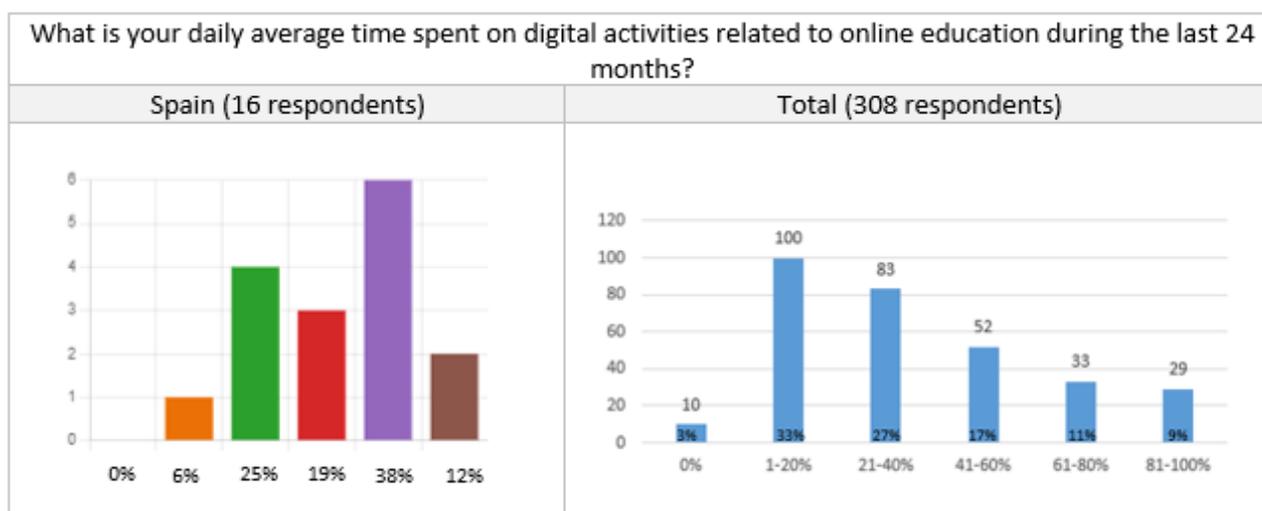
In relation to the level of VET institutions regarding digital competences, the DigCompEdu proficiency levels were used for this purpose, which is explained below:

- 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.

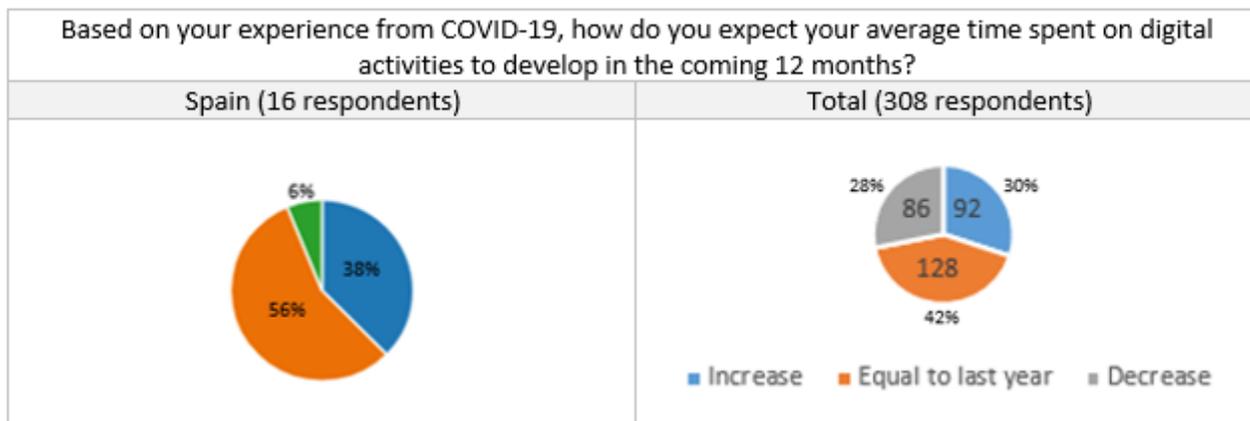
As can be seen in the graphs below, the majority of respondents indicated that their VET institutions in general were at the "Integrators" level in terms of digital competences:



In relation to the average amount of time respondents spent daily on digital activities related to online education in the last two years, the majority of Spaniards spent between 61-80%, while the total was mostly between 1-20%:



In addition, the majority of respondents indicated that their time spent on digital activities relative to last year remained the same, given that the COVID-19 pandemic is now in its second year and digital activities seem to have been normalised:



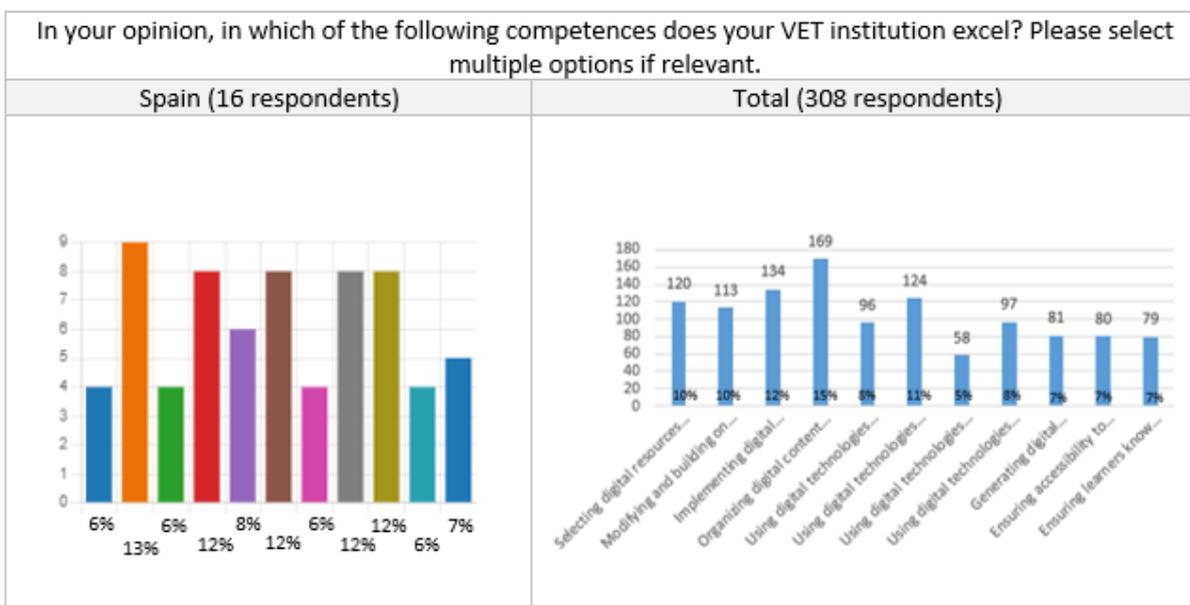
Respondents were asked about the following competences, in which their institution excelled and in which they needed to improve:

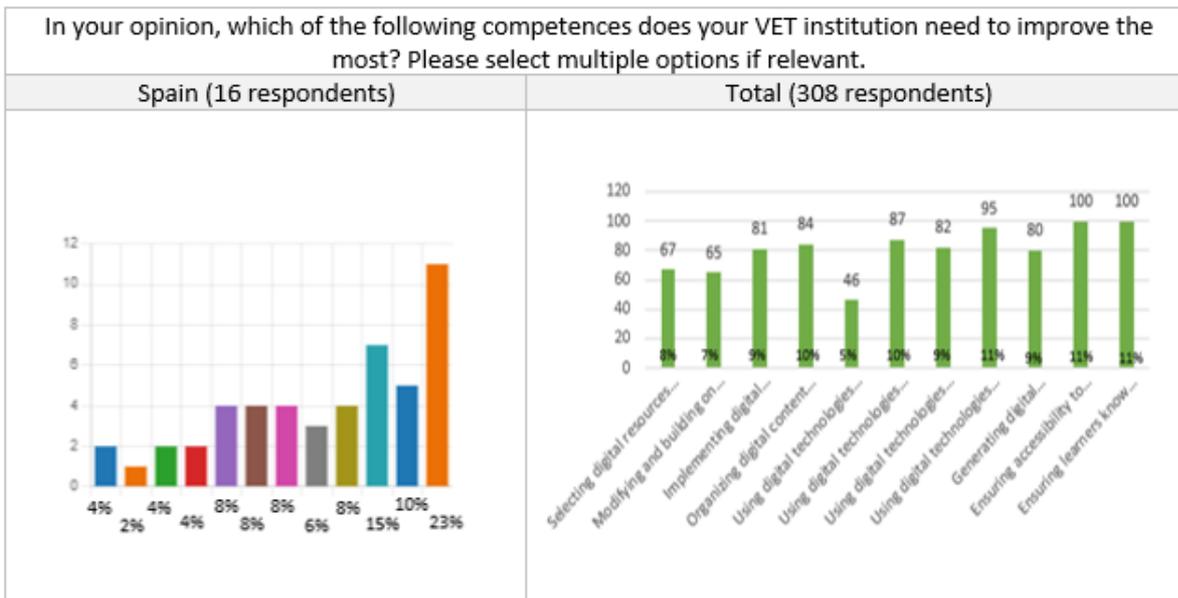
- Selecting digital resources and devices for teaching and learning.
- Modifying and building on existing digital resources and devices for teaching and learning.
- Implementing digital resources and devices in the teaching process.
- Organizing digital content and making it available to learners.
- Using digital technologies to provide targeted and timely feedback to learners.
- Using digital technologies to enhance learner communication and collaboration.

- Using digital technologies to enable learners to reflect on their own learning and share insights.
- Using digital technologies to address learners' diverse learning needs by allowing individual learning following different levels, goals and speeds.
- Generating digital evidence on learner activity, performance and progress.
- Ensuring accessibility to learning activities for learners with special needs.
- Ensuring learners know how to manage risks and use digital technologies safely and responsibly.

The results in terms of the competences in which VET institutions excelled were very similar across all competences, indicating that they were diverse and varied profiles, and that they were equally distributed, both for the total and for Spaniards.

However, in terms of skills or competences to improve, while the total was also equally distributed, the majority of Spaniards indicated that they needed to improve in “ensuring learners know how to manage risks and use digital technologies safely and responsibly”, highlighting a gap in terms of cybersecurity knowledge:





Furthermore, respondents were asked whether they had participated in digital training activities in the last year to improve their digital skills, with the answer being "yes" for 12% of Spaniards and 41% of the total.

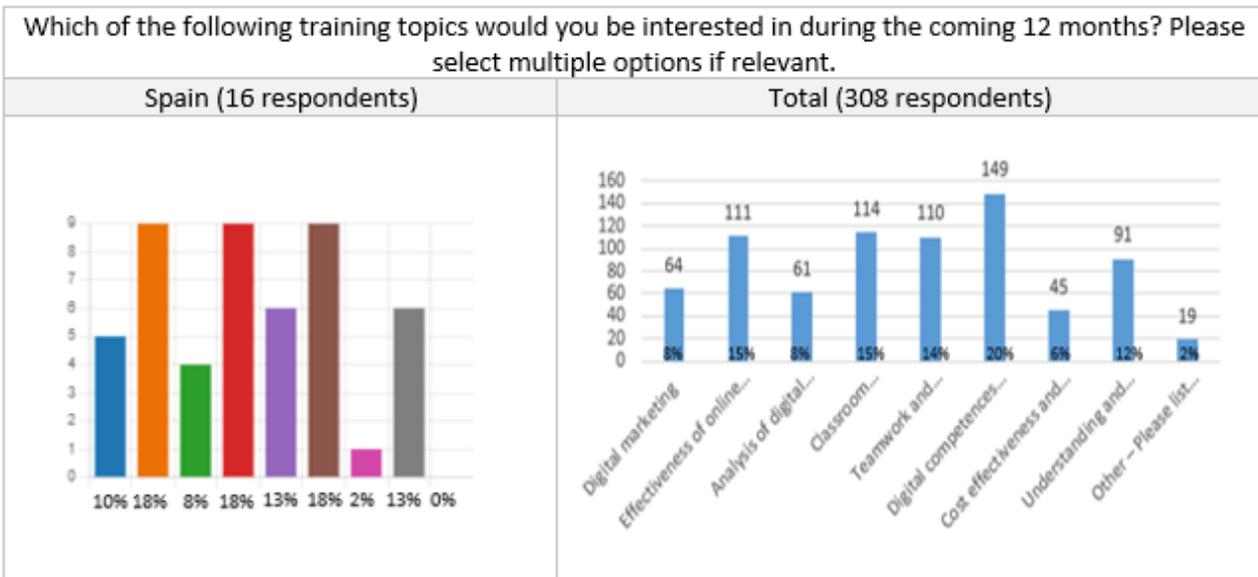
In relation to the subjects in which they were trained, respondents indicated the following:

If "yes" at question 8, please list topics here	
Spain (16 respondents)	Total (308 respondents)
<ul style="list-style-type: none"> • Initiation to Google tools • Operation and implementation of Virtual Classrooms and Google Drive as a tool to work with students without using paper. 	<ul style="list-style-type: none"> • Specific digital tools • MS Office • Online teaching • <u>Skills</u> • Online Marketing • Train the trainer • Communication • Didactic IT • Vocational pedagogic • Blended learning • Cyber Security • Gamification • Google Tools

Respondents were also asked which training topics they would be interested in in the next 12 months, choosing from the following:

- Digital marketing.
- Effectiveness of online VET – choosing the right digital tools.
- Analysis of digital resources and understanding of digital reliability.
- Classroom management within the virtual classroom.
- Teamwork and collaborative digital classroom.
- Digital competences for teachers and tutors.
- Cost effectiveness and budgeting of digital competences.
- Understanding and evaluating digital resources.
- Other.

The results at European and national level coincided in that there was more interest in “Effectiveness of online VET”, “Classroom management within the virtual classroom” and “Digital competences for teachers and tutors”:



Among those who chose the option "other", the responses were as follows:

If "Other" at question 10, please list topics here.	
Spain (16 respondents)	Total (308 respondents)
N/A	<ul style="list-style-type: none"> • Cyber security • Digital learning environments • Personal management tools • Digital pedagogy • Digital tools • Laboratory teaching • Excel • Google classroom • Google App • Digital well-being • Digital media in VET • Story telling • Students with special needs • Autocad • SQL Database query

Finally, respondents were asked about their knowledge concerning the European Framework for the Digital Competence of Educators (DigCompEdu), and the results were that 23% of the total were aware of it (37% of Spaniards). As for the use of DigCompEdu in their institutions, only 12% of both groups (total Europeans and Spaniards) answered in the affirmative, while the majority reported no knowledge of it (44% Spaniards; 50% total).

Regarding the use of DigCompEdu in their institutions, they were asked at what level it was used between:

- Strategic level – improving digital competences and budget allocations.
- Tactical level – short term planning to achieve strategic goals.
- Operational level – identifying gaps in skills and defining goals and targets for online pedagogy skills.
- I don't know.

The great majority did not know about it (80% of the total, 70% of Spaniards), and the rest answered equally to the other options.

Having analysed the results of the survey at national (Spain) and European (consortium countries) level, a number of conclusions can be drawn:

- In relation to the sample, institutions at European level as a whole are more likely to have provided online education before COVID-19 compared to the sample of Spanish institutions, although the majority are at the "Integrator" level for both results.
- Results from Spain indicate that on average VET educators currently spend more time on education-related digital activities than the European average.
- The amount of time currently spent on digital activities is the same since the pandemic began, which may indicate that this type of education has become normalised over time as it has continued in many cases despite the end of health restrictions.
- Spanish respondents highlighted their level of use and organisation of existing digital technologies and adaptation to their students, generating digital evidence of activities. On the other hand, overall respondents excelled in the organisation of digital content and the implementation of digital resources in teaching.
- Spanish respondents identified their own gaps in relation to cybersecurity and the management of digital risks by their learners, as did European respondents who also added ensuring the accessibility of their activities for learners with special needs.
- In terms of interest in learning about specific activities by VET educators, most VET educators agreed that they were interested in activities to improve their own digital competences and virtual classroom management.
- There is a lack of knowledge about the European framework DigCompEdu among VET educators themselves, who do not even know at what level it has been implemented in their institutions.

Based on the above findings and conclusions, the following focus areas have therefore been identified for the RESET project in Spain:

Improving the digital competences of VET trainers through the European framework DigCompEdu.

Selection and implementation of digital tools and resources in the teaching process.

Use of digital technologies and creation of digital content accessible to all learners in the teaching process.

Cybersecurity, digital risk management and safe internet navigation, with results transferable to VET learners.

Equip VET institutions and educators in order to ensure that learners acquire the ability to reflect on their own learning and digital competences.

A correct approach to the most relevant areas of the RESET project will allow increasing the resilience and the level of efficiency of VET systems in a post COVID-19 context, as well as improving the performance and competences of VET trainers and educators and ensuring accessibility for all learners in the teaching process.

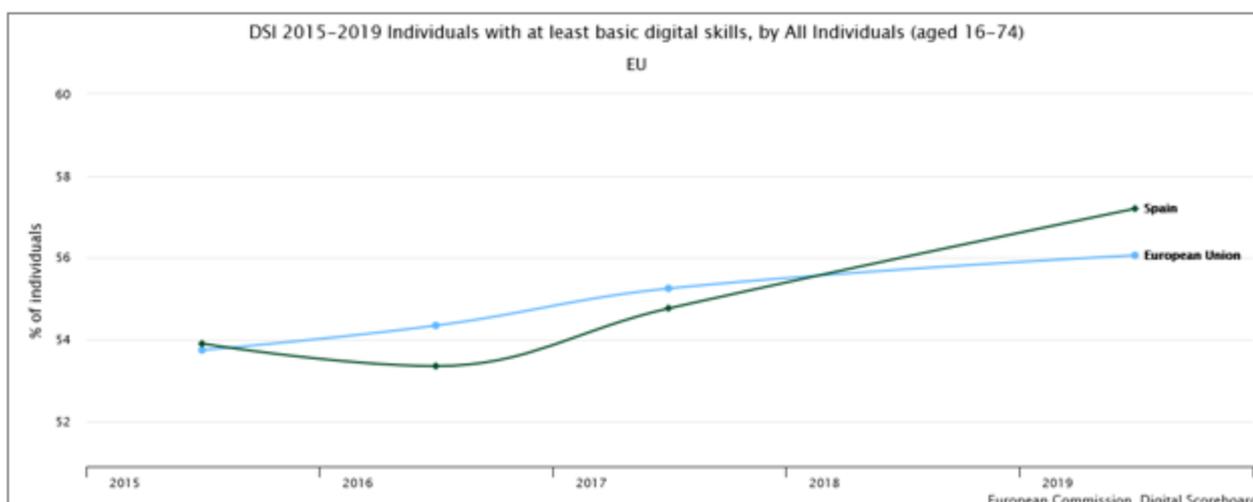
B. Desk research – secondary level

A series of documents and reports are presented below in order to identify the dynamics, trends and training needs related to digital skills and competences in Spain:

- Spain in the Digital Economy and Society Index (DESI) – European Commission (2021)

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, summarising the values of up to 44 indicators related to the dimensions of connectivity, human capital, integration of digital technology and digital public services.

Spain ranks 9th out of 27 EU Member States and performs well in digital public services (ranks 7th) and connectivity (ranks 3rd). However, its worst result is in the integration of digital technology (ranks 16th). The relevant information for RESET in this case is related to human capital; Spain ranks 12th, and although in recent years it has been climbing positions, there is still a margin for improvement. Within human capital, digital skills are measured at least at basic level, and above basic level, so that 57% of the Spanish population has at least basic digital skills, 1% above the EU average. The following graph shows the evolution of this variable in Spain compared to the EU average:



In order to improve these digital skills, included in one of the ten priorities of the Spanish digital strategy "Digital Spain 2025", the National Digital Skills Plan has been adopted (which we will also present below), which includes a detailed set of measures aimed at strengthening the digital skills of the working population and citizens in general.

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

This 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. Although the evolution of the digital skills of the Spanish population is positive, the current level is still a brake on digital transformation. This is why the plan distinguishes a series of lines of action and measures to address the challenges related to digital competences.

Among the seven lines of action, the most relevant for RESET are: (1.) Digital empowerment of citizens (with emphasis on groups at risk of digital exclusion) (Axis I. Digital transversal competences), and (3.) Digitalisation of Education and development of digital competences for learning in Education (Axis II. Digital Transformation of Education). For these two lines of action, a series of measures have been established, such as the training of the population through MOOCs, specific actions for digital inclusion, a Digitalisation and Digital Competences Plan for the Education System, and the Digital Vocational Training Plan. All these measures are perfectly aligned with RESET's objectives, reflecting the importance of carrying out a project aimed at providing the resources for effective digital training in a post-pandemic context.

The document provides a complete SWOT analysis for different population groups, from which we have extracted below the most relevant conclusions for RESET:

SWOT ANALYSIS – National Digital Skills Plan

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • Students are the group with the highest levels of basic digital skills (94.2%) and advanced digital skills (79.2%). • 91% of Internet users in Spain, which favours informal learning networks. • High connectivity (via landline or mobile: 95% of the population). • The number of students per computer in public non-university schools is 2.8. 	<ul style="list-style-type: none"> • 8% of the Spanish population has never connected to the Internet. • 45% of the Spanish population lacks basic digital skills. • 21% of students do not have advanced digital skills. • Long lead times for curriculum approval vs. speed of change in digital technologies.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Informal learning networks (people teaching people). • A multitude of international experiences with success stories and codes of good practice. • Expansion of the Internet of Things and the proliferation of smart devices. • Growing e-commerce, popularity of social networks, high level of e-administration development. 	<ul style="list-style-type: none"> • Risk that the digital skills of Spanish students are deficient compared to other European countries, which may hinder their integration into the labour market and the competitiveness and modernisation of the Spanish market. • Risk of increasing digital divide due to fast expansion of new technologies, which requires continuous learning and adaptations.

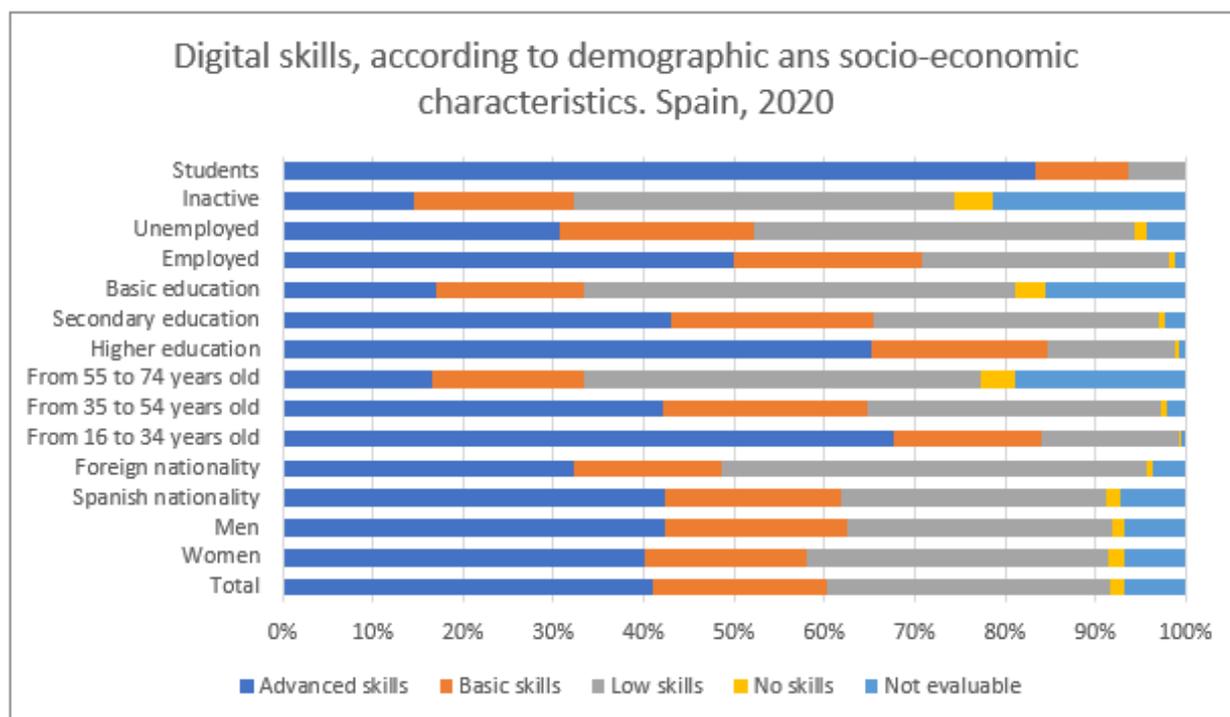
The National Digital Skills Plan provides a framework for studying the situation of digital skills in Spain and the measures and resources available to improve them among the Spanish population.

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

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 because they do not have the necessary skills.

The following graph, based on data extracted from the report, shows that within the Spanish population, students have the most advanced digital skills, which will facilitate an increase in the level of efficiency of the VET system through RESET project.

The report also shows the level of digital skills in 4 categories: digital skills related to information handling, communication, problem solving and software handling. In all of them, students score very well. However, the overall population has a better level of information management and communication and performs considerably worse in software handling (only 46.1% have advanced skills). Despite this, the level tends to be above or very close to the EU average.



After analysing the above-mentioned documents, it is possible to answer some questions in line with the desk research theme. Firstly, we know that although the COVID has produced a major crisis both in Spain and worldwide, it has made it possible for the digital transformation to advance considerably faster. With the Great Confinement starting in March 2020, all students had to stop attending classes in person, forcing the VET system to conduct classes virtually.

Fortunately, as the Cotec Foundation report indicates, students generally have a high level of digital skills, so most of them were able to manage it well. However, teachers may also need to improve their digital skills in order to be able to perform well in the VET system.

Thanks to the implementation of the online system in education, many people have been able to combine their studies with work or other activities, as students did not need to waste time moving around, and could still be present at home even when they were studying.

Regarding the level of awareness and use of DigCompEDU in Spain, there is still not much evidence of its use in the classroom. We find small hints, such as the adaptation of DigComp by the National Institute of Educational Technologies and Teacher Training. However, this opens the way for the RESET project to make it known among VET trainers, so that they know the benefits of its use for greater resilience and effectiveness in teaching.

The DigComp framework is better known in Europe, being even mentioned in the National Digital Skills Plan, but despite this it is not yet sufficiently adopted in Spain. For its full adoption, there are some possible barriers: mainly, the lack of knowledge on the part of both citizens and the VET ecosystem. It is difficult to adapt official curricula, as they depend on public bodies that update their programmes from time to time. However, their adoption by the VET system in Spain would lead to greater awareness.

Being aware of DigComp's competences will enable people to look for ways to improve them individually and in a structured way, thus reaching a level of proficiency.

C. Partners' digital competences and needs

Internet Web Solutions (IWS), being a technology-based company dedicated to web programming, already had a good level of digitalisation and digital transformation previous to the COVID-19 pandemic. Although the pandemic and the great confinement that occurred in the first half of 2020 caught everyone by surprise, it is clear that it affects to a lesser extent a company that has the facility to opt for working from home, as it is not totally necessary for all employees to be in the same physical place to work in a coordinated way.

This is why, from the beginning of the pandemic until the end of 2021, IWS managed to maintain teleworking without any loss in productivity, maintaining a constant flow of communication within the team thanks to the use of communication platforms and online videoconferences, email, etc. After the return to the office in the new normal, teleworking has continued to be an option where necessary, demonstrating the company's resilience and ability to adapt to change.

As IWS is a technology partner with more than 10 years of experience in more than 30 Erasmus+ projects, digital learning has always been present; this type of learning has proven to be flexible and easily accessible for a large part of the population. As mentioned above, in Spain there are 91% of Internet users, and this percentage is constantly increasing. Technologies are already part of the daily life of millions of people, and it is becoming more and more easy for them to access this type of training, either through mobile devices such as smartphones or tablets, or through computers.

IWS's approach to digital learning is very complete, as it has always been present from the creation and development of the online platform used to offer online training, to the development of training content and the delivery of specific courses online or in person.

If we focus on European frameworks such as the European Framework for Digital Competence of Educators (DigCompEdu), the Digital Competence Framework for Citizens (DigComp), the European Entrepreneurship Competence Framework (EntreComp), among others, these are increasingly used in training projects as they allow to follow a standardised competence framework.

Therefore, the IWS team has knowledge of various competency frameworks, including DigCompEdu, and has been used on numerous occasions for the creation of training content for training of trainers related to improving the professional and pedagogical competences of educators, as well as the competences of students and learners.

If we follow the DigCompEdu progression model (A1 to C2), it could be said that, in general, the level of IWS as a RESET partner would be around B1 to C1 levels, with a higher level in those competences related to resources and digital learning. Directly or indirectly, this type of competence is always at least integrated in the activity of IWS.

With regard to the survey, which was carried out on a total of 308 people, 16 of whom completed the survey in Spanish, this is a fairly representative sample at European level, although it is slightly smaller for Spain. However, the results from Spain indicate that the trends are quite similar to the rest of the countries when it comes to online VET education in the post-COVID-19 context, so we can be easily guided by the overall results of the survey.

According to the results, one of the most remarkable data is the amount of time spent daily on average by Spanish VET educators on education-related digital activities (61-80%), compared to the rest of the respondents (1-20%). Although most of the Spanish respondents had not been engaged in online educational activities before the COVID-19 pandemic, two years later they have adapted to it and spend a large amount of time on these types of activities.

Not only that, but two years after the start of the pandemic, with far fewer health restrictions than at the beginning, VET educators are still spending the same amount of time on digital activities as they did last year, even though most activities have returned to normal, with face-to-face education returning in most cases. However, due to the pandemic and the forced inclusion of online activities in education, it has now become an option to facilitate access to education from remote locations.

It is also quite remarkable in the survey results that there is a wide lack of knowledge about the European framework DigCompEdu in VET institutions, even at European level. This is a problem that will need to be addressed through the dissemination of the RESET project, which will use DigCompEdu to enhance the digital competences of VET educators.

Regarding the country's level of digital skills and needs, which was discussed in the previous section, it is clear that Spain has an intermediate level of Internet use, which is usually above the European average in the Digital Economy and Society Index.

It seems that this issue is becoming a priority for the country, which is why strategies such as "Digital Spain 2025" or plans such as the "National Digital Skills Plan" are being adopted. Although this shows the intention to improve, existing weaknesses need to be addressed.

It is worrying that almost half of the society in Spain lacks basic digital skills, so the focus should be on providing adequate training for all levels of the population, and achieving a higher percentage of minimum digital skills. Furthermore, reaching 100% of the population using the Internet would be an important challenge that would bring all citizens closer to a more equal level of opportunities.

There is also a need to increase the speed of adapting changes in education systems; technological changes occur on a daily basis, and if curricula do not adapt to them quickly, valuable time is lost. The better prepared the students, who will be the workers of the future, the more society will be able to move forward.

If the available opportunities are exploited and threats, such as the possible widening of the digital divide which has become more pronounced in the aftermath of the COVID-19 pandemic, are addressed, it is possible to see favourable changes in a short period of time.

A good way to address these needs would be to increase the use of frameworks such as DigCompEdu in formal and non formal education, as this would increase trainers' awareness of the importance of digital competences and help them improve their own skills. If a trainer does not have the necessary skills, they will not be able to pass them on to their learners either, so this is would be a good starting point.

Considering the third document analysed, it is clear that students and younger people have the most advanced digital skills: more than 60% of students and people aged 16-34 have advanced skills. Moreover, the higher the level of education, the higher the level of digital skills.

However, as age increases, the level of digital skills decreases, so older people will need to be supported to integrate into an increasingly digital society, where many tasks are already done online. For example, one problem today is related to online banking, as there are fewer and fewer bank branches in which to conduct transactions, which are done almost exclusively online. However, older people do not have the means or skills to manage their accounts online.

The COVID-19 pandemic has increased these digital skills inequalities, as the use of the Internet and new technologies have become increasingly integrated into everyday processes.

D. Summary

Having completed the desk research of the Spanish context, it is noteworthy that, despite being in a good position with regard to online learning and connectivity on the part of Spanish citizens, there are still many barriers to be overcome in order to improve the level of effectiveness of formal and non-formal VET after the pandemic.

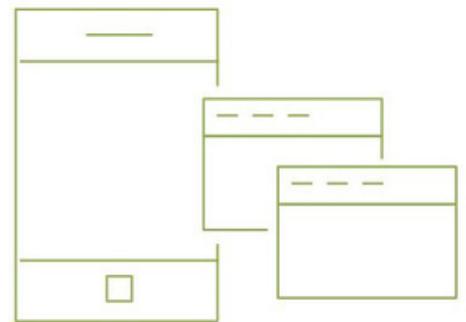
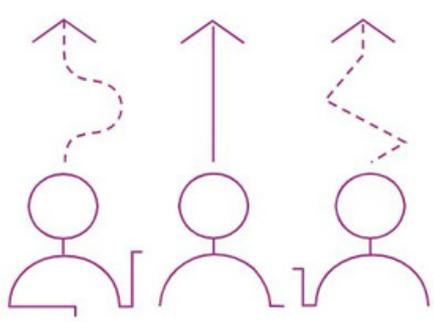
Thanks to the survey carried out at Spanish and European level, it has been possible to find some focus areas / skills gaps for the RESET project, such as:

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

In summary, and in conjunction with all the information available, the result of the RESET digital training options would consist of the following list:

- Digital marketing of VET provision
- Effectiveness of online VET: choosing the right digital tools
- Digital Asset Analysis & understanding of digital reliability
- Digital classroom management
- Teamwork and collaborative digital class
- Digital skills and competences for VET educators and tutors
- Cost-effectiveness and budgeting for VET
- Understanding and evaluating digital assets

The set of these themes will improve the performance of teachers in digital teaching and online activities, equip VET institutions with innovative and effective training solutions, initiate and/or enhance the process of digitisation of institutions, and enable the target group to learn about the DigCompEDU framework and acquire new knowledge, practices and experiences from the European VET ecosystem.



Partners



<https://project-reset.eu>

