DIGITAL PEDAGOGY Cookbook

Digital Pedagogy in Vocational Education and Training

Based on a survey of professionals in the VET sector

September 2020

Digital Pedagogy Cookbook

Project Partners

Active Citizens Partnership (Coordinator)
Greece
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ADICE
France
https://adice.asso.fr/

Community Action Dacorum
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Defoin
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Website

http://www.digitalpedagogycookbook.eu

Facebook

https://www.facebook.com/digitalpeda-gogycookbook/

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INTRODUCTION

Faced with today's digital society, it is no longer possible to work without using a single digital tool. Nonetheless, this doesn't mean that everyone will be able to master digital technology in its complex entirety. However, teachers must be aware that such changes require us to constantly update our knowledge. But what digital tools exist and how can they be used effectively? What are the advantages for daily work?

Through the different tools created in the KA2 Erasmus+ project "Digital Pedagogy Cookbook", the project partners (France, Germany, Greece, Spain, United Kingdom) sought to address the difficulties of trainers and teachers in the Vocational Education and Training (VET) sector who are obliged to update and use more and more digital tools in order to gain the attention of their audience, meet the latest organisational standards and adapt to new pedagogical methodologies.

This is how the project partners (Active and Citizen Partnership, ADICE, DACORUM, DEFOIN and IBERIKA) developed:

- A practical guide for educators including theoretical information on digital pedagogy, a list of interesting applications available;

- A pedagogical recipe book containing concrete examples of the use of certain digital applications (more or less known) for learning purposes;

- A community of practice allowing the exchange of good pedagogical practices and thus favouring the enrichment of teachers and trainers through the sharing of methodologies, different and new knowledge;

- A study on the contribution of these recipes to the daily work of educators and teachers in Vocational Education and Training (VET).

The latter includes, based on a questionnaire with a sample of 31 teachers and trainers, recommendations on the application of the different recipes and their transferability potential in the daily work of the VET sector.

This study attempts to provide concrete examples and insights into the use of digital pedagogy in the daily work of a teacher or trainer in the VET sector.

Context of the study "Digital pedagogy in the VET sector"
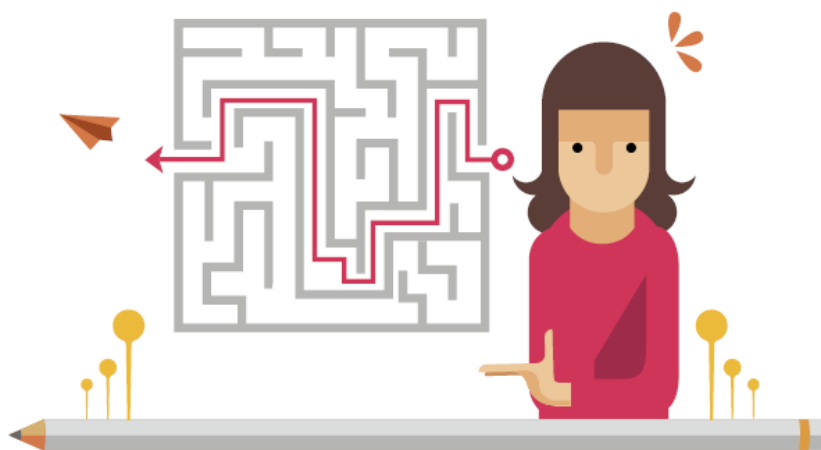
In the labour market, the need to develop new skills, particularly digital skills, in order to be "competitive" is becoming the norm.

Harnessing the potential of ICT in education and training therefore represents a new challenge for professionals which requires a change in their training practices and methodologies, as well as in their design of programmes and materials. These changes have given rise to the new name "digital pedagogy".

While "digital pedagogy" has become kind of self-evident without questioning its meaning. It should be understood as **the use of digital elements to enhance or modify the educational experience**[1]. The concept of digital pedagogy therefore doesn't refer only to the use of communication and information technologies (ICT), but raises the question of the working methods and pedagogical strategies chosen in a highly digitalized world.

Training occupations in the Vocational Education and Training (VET) sector are no exception.

Here, **the VET sector is to be understood as a key element of lifelong learning such as skills training and the teaching of knowledge related to a specific occupation, professional activity or trade.** "[2]

Various European studies have also highlighted the need to integrate digital tools into the pedagogical practice of teachers and trainers in the Vocational Education and Training sector.

According to the European Centre for the Development of Vocational Training[3], it's currently essential to understand the effects of digital educational tools on professionals. Indeed, this enables them to identify gaps in the system and to thus develop new working methodologies and to develop models and tools that can help VET teachers and trainers to adapt their teaching and learning methods to the different needs of students and learning context.

[1] Introduction to Digital Teaching for Members of Parliament, Brian Crowfall : http://www.briancroxall.net/digitalpedagogy/what-is-digital-pedagogy/
[2] European Commission, Education and training, « EU policy in the field of Vocational Education and Training", 2020, https://ec.europa.eu/education/policies/eu-policy-in-the-field-of-vocational-education-and-training-vet_en
[3] Cedefop, Vocational pedagogies and benefits for learners: practices and challenges in Europe. Luxembourg: Publications Office of the European Union. Research paper n°47, 2015.

Contrary to the majority of actions implemented in the European Union, the "Digital Pedagogy Cookbook" project aims to support trainers and teachers in digital pedagogy not through the creation of new digital tools but by using the wide range of existing tools, illustrating and creating a user manual for their use in pedagogical learning in VET.

This survey report, together with the various intellectual outputs of the project, aims to demonstrate that digital pedagogy in the VET sector is not just about using a Prezi presentation or video with pupils, but also about reflecting on how the very format of the course or training should and could evolve through digital technology. Here the teacher/trainer, responsible for developing a pedagogical strategy, plays a key role.

Thus, today, the use of digital tools is more and more advocated in the daily work of VET teachers and trainers in order to better involve students, create, disseminate, store and/or manage information.

The results of the survey will enable partners and stakeholders to provide ideas for digital tools and pedagogical practices for VET professionals to meet society's expectations and requirements. Teachers and trainers will also provide their testimonials valuing the use of the tools created in their daily lives, the challenges they faced and how they met them. In this way, professionals will be able to draw on their experiences and ideas to adapt the use of digital tools in their teaching practice..

Methodological framework of the survey

Organization of the survey

During the implementation of the "Digital Pedagogy Cookbook" project, the partners worked on the different intellectual productions taking into account the already existing tools, in particular the "European Framework for the Digital Competence of Educators" (DigCompEdu - 2017). This European framework was created in response to the growing needs of educators in the member countries of the European Union to develop specific digital skills for their profession and to grasp the potential of digital technologies to improve and seek to innovate education

The partners in the Digital Pedagogy Cookbook project have based the study and analysis on this European framework (DigCompEdu) which identifies the digital competences of educators, and in particular the digital pedagogical competences of educators[4], as follows:
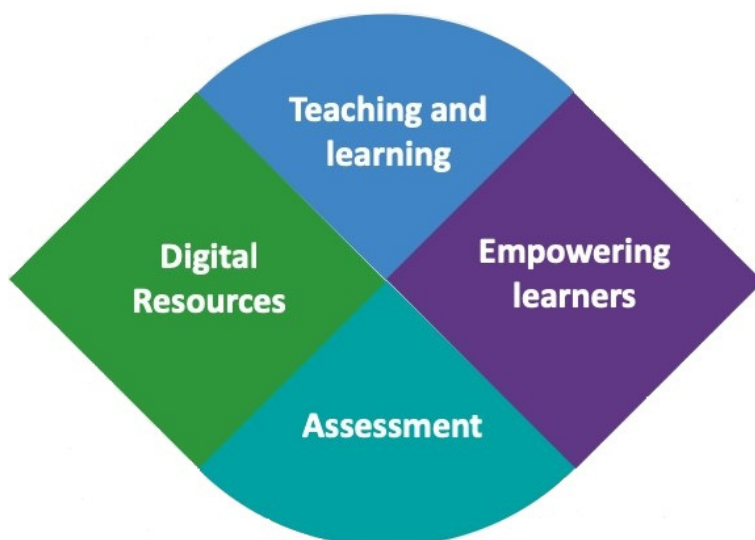
DigCompEdu - Figure 2: the "DigCompEdu areas and scope", p.15

This survey of 31 teachers and trainers in the VET sector was carried out between April and June 2020, i.e. in the midst of a health crisis due to the Covid19 present in the different partner countries. This was a period during which teachers and trainers had to adapt their methodology and pedagogy and the use of digital tools was no longer secondary but at the centre of education and training. Survey participants were even more interested in the study. The results reflect the importance of digitalization in pedagogy and the need for knowledge about the use of diverse digital tools.

In order for respondents to clearly define the specific tools and criteria that add value to their daily practice, the project partners developed a questionnaire consisting of closed multiple-choice questions with multiple examples or categories of numerical tools and an open-ended question. The form was organised according to the four main categories of digital pedagogical competences of DigCompEdu educators.

The questions were enriched by the knowledge and experience of the project partners, especially in the examples of digital tools that can be used in the VET sector, which you can find in the cookbook created during the Digital Pedagogy Cookbook project.

This survey was enriching, particularly because of the multicultural nature of the partners and respondents, but also because of the mutual experience of each.

[4] Each skill will be explained in the following pages.
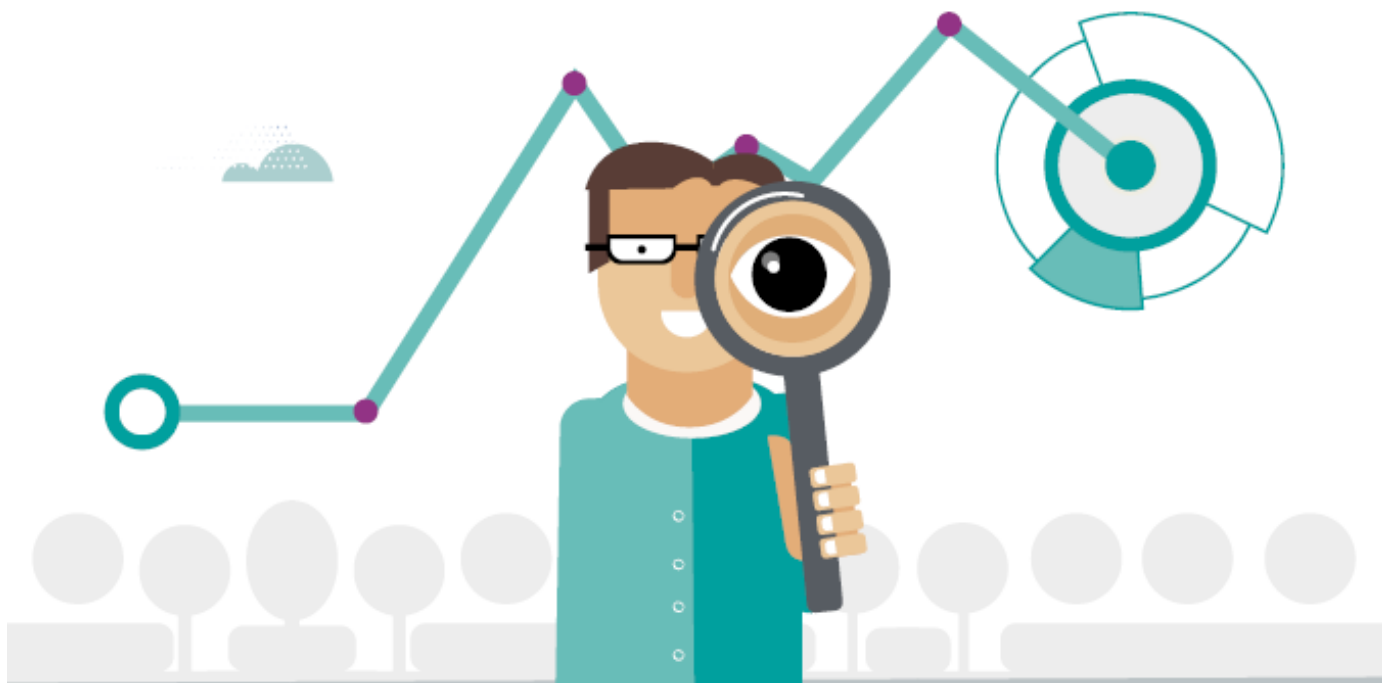
Analysis of interview results

A total of 31 responses to the questionnaires were analysed. Data acquisition and analysis of the results was carried out between June and August 2020. 10 English professionals responded to the questionnaire: 8 in the United Kingdom, 7 in Spain, 6 in France, 6 in Greece and 4 in Germany. In order to determine the most appropriate methods for capturing the results and comparative analysis of the data, an Excel database was created. This was used to cross-reference the data and format the statistical and qualitative analysis presented in the following pages. The partners contacted the trainers by telephone for some of them and/or by e-mail to discuss the project and to transmit the questionnaire via Google Forms.

The aim of the questionnaire was therefore to assess the transferability potential of the digital tools included in the **cookbook** by identifying the digital tools used by VET professionals and the impact these have on pedagogy. This enabled us to carry out a detailed context analysis in order to give readers the most appropriate possible answers to the needs and shortcomings observed.

Analysis of the results

Section 1: Digital resources

As a reminder[5], the European Framework of Digital Competences for Trainers explains "Digital Resources" as one of the key competences that every educator should develop, which consists in adapting to the multitude of digital educational resources, in effectively identifying the resources that best match their learning objectives, the group of learners and the teaching style, in structuring the richness of the material, in establishing and modifying, complementing and developing digital resources themselves to support their teaching.

At the same time, educators and trainers need to be aware of the responsible use and management of digital content. They must respect copyright rules when using, modifying and sharing resources, and protect sensitive content and data, such as exams or student notes, for example.

1.1) Selecting digital resources

While the list of digital resources is broad, it is all the more important for VET professionals to identify, evaluate and select digital resources for teaching and learning. This can only be done when they take into account the specific learning objective, context, pedagogical approach and group of learners when selecting digital resources and planning their use.
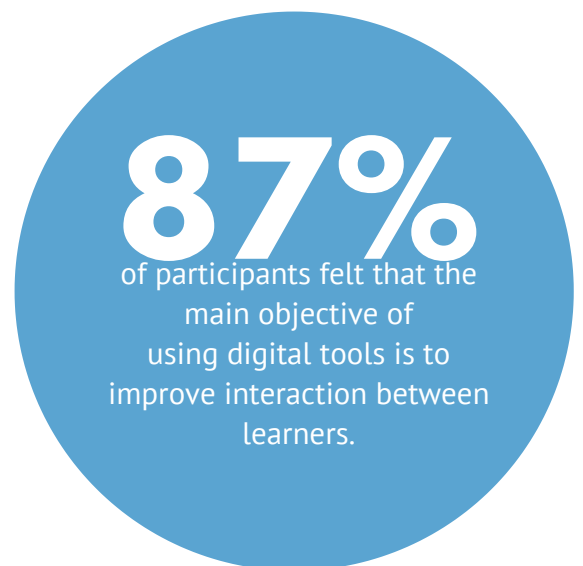
87%
of participants felt that the main objective of
using digital tools is to improve interaction between learners.

In the course of the study, participants were asked for their views on what they felt was the main purpose of using these digital tools. 87% of participants felt that the main objective of using digital tools is to improve interaction between learners. The second most common objective, with a percentage of 70% of participants, was the organization of digital content to make it as accessible as possible to students. It's also interesting to note that 61% of the participants in the survey say that using of digital tools is intended to enable the creation or co-creation of new digital learning resources as well as to meet the diverse learning needs of learners. By creation or co-creation, it's necessary to understand everything related to the creation of digital presentations, animations, links, multimedia or interactive digital tools in digital pedagogy.

Thus, teachers and trainers do use tools for a specific learning objective. The search for means to achieve results is a question that the project partners wished to answer during the project by creating pedagogical paths for the use of digital tools.[6]

70%
of participants selected the objective: organization of digital content to make it as accessible as possible to learners

As discussed above, using digital tools can be complex when professionals are faced with a wide range of digital resources. In order to get an overview of the tools most used by trainers on a daily basis, a list of resources that can be part of the pedagogy has been drawn up. More than 90% of VET professionals reported using meeting applications such as Zoom and Skype[7]. More than 80% of them also reported using presentation tools (PowerPoint, Prezi[8]) and visual material (YouTube, educational videos…[9] during training courses as well as online storage tools.

It should be noted that these results were collected during the health crisis linked to the Covid19 pandemic. This means that the daily use of these tools during the crisis was stronger than in normal times, through the introduction of teleworking and online training and education. For example, applications for organizing meetings would thus be more in demand.

[6] Cf Website project or see to the Digital Pedagogy Community of Practice group on Facebook
[7] Cf "Digital Pedagogy Cookbook"- Recipe "Use Skype Classroom for connecting with similar learning groups across the world to share ideas, language and culture"
[8] Cf "Digital Pedagogy Cookbook"- Recipes "Use PowerPoint to provoke group discussion"
[9] Cf "Digital Pedagogy Cookbook"- Recipes "Use YouTube videos to compile vocabulary/expression word banks » or « Increase student engagement in educational videos »

MAIN OBJECTIVES OF USING DIGITAL TOOLS

Objective	
To exchange the effectiveness of a teaching process	
To organise digital content and make it available to learners	
To create or co-create new digital educational resources	
To enhance the interaction with learners	
To support self-regulated learning processes	
To address learners' diverse learning needs	
To create collaborative learning and assessments	
To assess someone's work/group work	
To provide targeted and timely feedback	
I do not see any added value in using digital tools	

0%   25%   50%   75%   100%

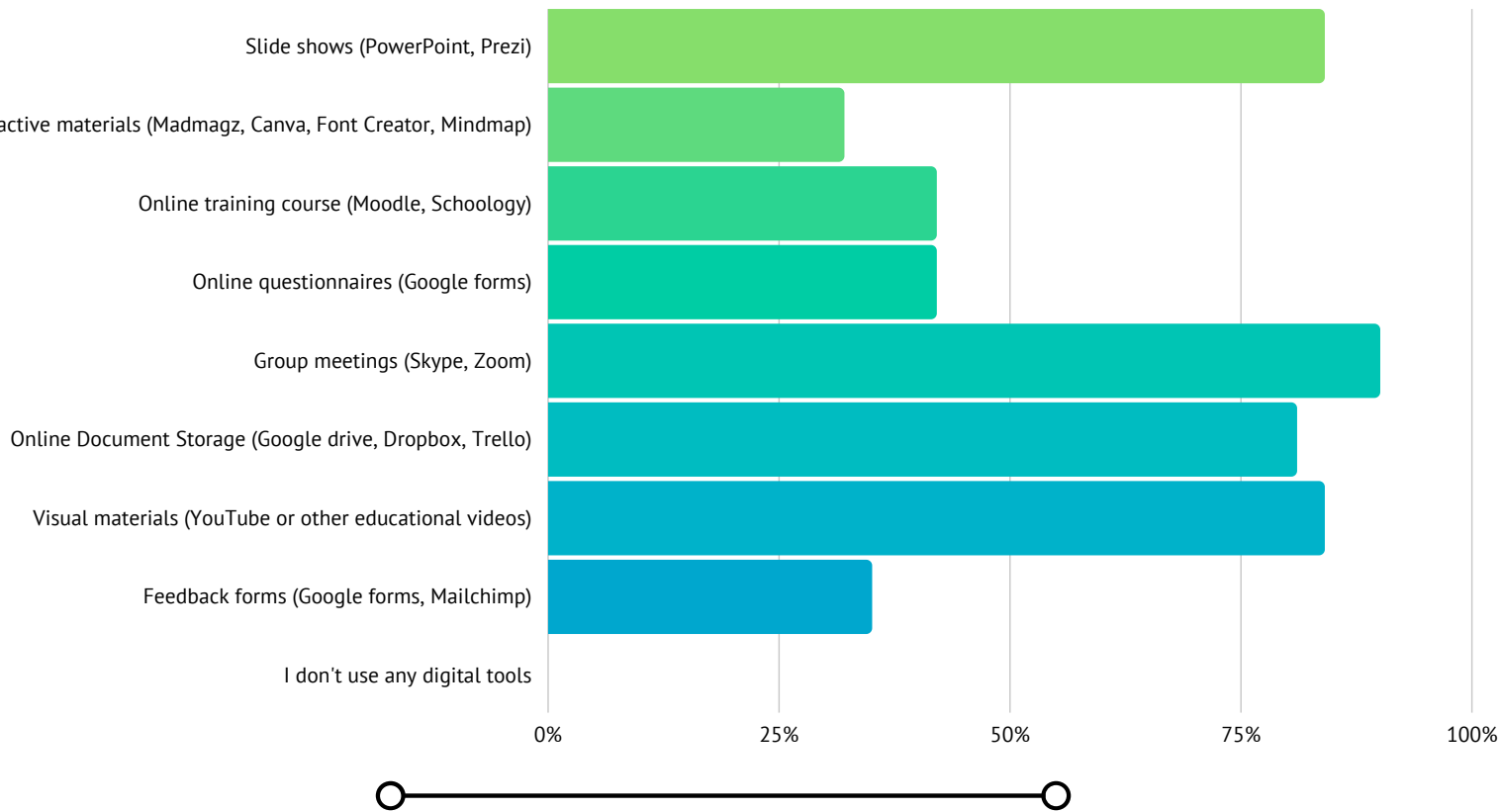These tools identified by the survey participants are to be put in relation to the main objective selected by the respondents since the trainers use these tools to promote exchange and interaction between learners in an environment where the situation does not allow for physical encounter and classic interaction.

It should[10] be noted that in France (with a perfect score of 100% of respondents) and in the United Kingdom (with a high score of 75% of participants), online document storage tools are used by respondents on the same scale as meeting organisation applications, while in Germany, Spain and Greece, storage tools, although used by a majority, are not the first to be highlighted. We can therefore say that although digital resources are known by all countries, they are not used on the same scale.

[10] See "Digital Pedagogy Cookbook" – Recipes "Using Trello to Fostering Learning Collaboration & Communication between students" or "Create online portfolios on Google Drive"

DIGITAL TOOLS USED DAILY BY VET PROFESSIONALS

Slide shows (PowerPoint, Prezi)

Interactive materials (Madmagz, Canva, Font Creator, Mindmap)

Online training course (Moodle, Schoology)

Online questionnaires (Google forms)

Group meetings (Skype, Zoom)

Online Document Storage (Google drive, Dropbox, Trello)

Visual materials (YouTube or other educational videos)

Feedback forms (Google forms, Mailchimp)

I don't use any digital tools

0%   25%   50%   75%   100%

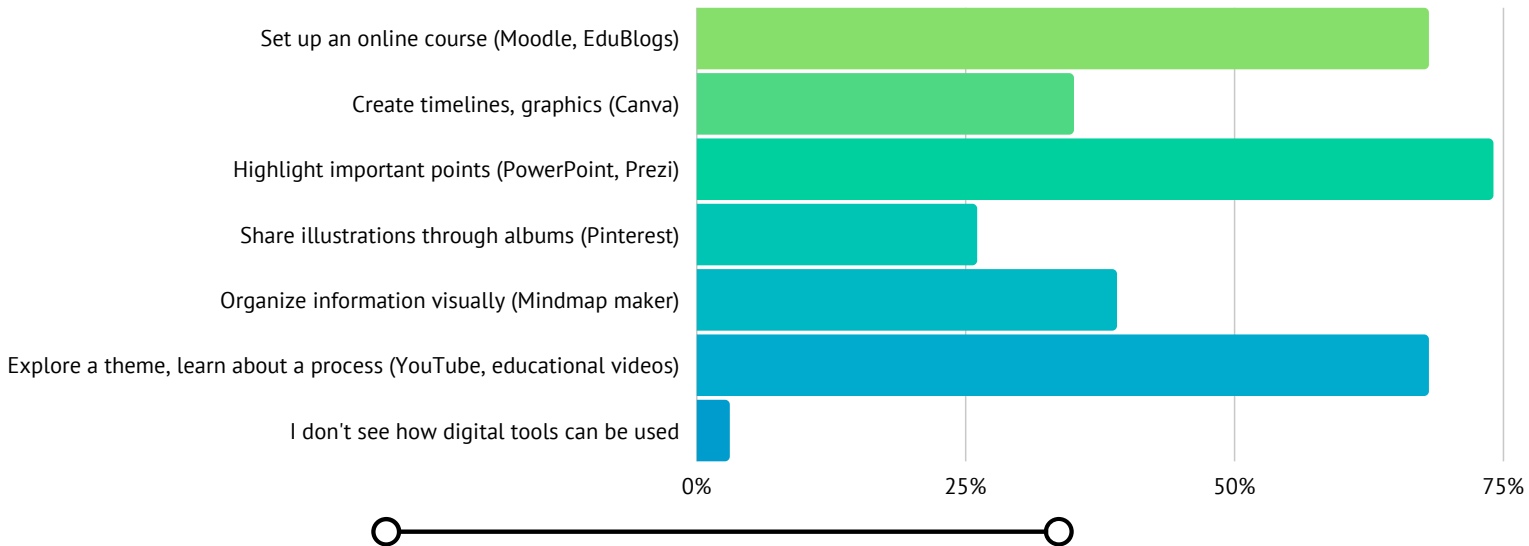## 1.2) Creating and modifying digital resources

The aim here is to create or co-create new digital educational resources by taking into consideration the specific learning objective, context, pedagogical approach and group of learners when designing the digital resources and planning their use.

Applications such as Prezi or PowerPoint[11] are considered to be the most suitable tools in a situation of creation or co-creation of digital resources for four out of five countries. Indeed, in Germany, survey participants indicated a greater use of online course tools such as Moodle and Edublogs[12] or educational videos such as YouTube.

[11] Cf "Digital Pedagogy Cookbook" – Recipes "Create a visual, interrelated lesson plan on Prezi"or "Implement Prezi for pair/group work in the class or at home to then present the next day"

[12] See "Digital Pedagogy Cookbook" – Recipe "Setup an educational blog in EduBlogs for sharing learning materials"

CREATING OR CO-CREATING NEW DIGITAL EDUCATIONAL RESOURCES

Set up an online course (Moodle, EduBlogs)

Create timelines, graphics (Canva)

Highlight important points (PowerPoint, Prezi)

Share illustrations through albums (Pinterest)

Organize information visually (Mindmap maker)

Explore a theme, learn about a process (YouTube, educational videos)

I don't see how digital tools can be used

0%   25%   50%   75%

SHARING EXPERIENCE

"It is still a work in progress for me. I have mastered shared screen using YouTube for a listening exercise and a PowerPoint presentation to highlight a research point on how to research on the internet on information about a country of choice. However, I have yet to do an interactive quiz which is something I will do to check the students' progress half way through the course."

Carenza from United Kingdom

1.3) Managing, protecting and sharing digital resources

"Management, protection and sharing of digital resources" should be understood to mean the organization of digital content and its availability to learners, parents and other educators. If the digital tools that emerged in the responses of professionals are, at more than 87%, in the order of online data storage (Google Drive, Trello...)[13], it is interesting to note that in the United Kingdom, document sharing tools such as WeTransfer[14] are selected at more than 87% while digital data storage resources were highlighted, with a percentage of responses of 75%, as tools to organize digital content and make it accessible to learners. Thus, once again, the finding is that digital tools are not used with the same frequency in different countries and organizations.

ORGANISING DIGITAL CONTENT AND MAKING IT AVAILABLE TO LEARNERS, PARENTS AND OTHER EDUCATORS
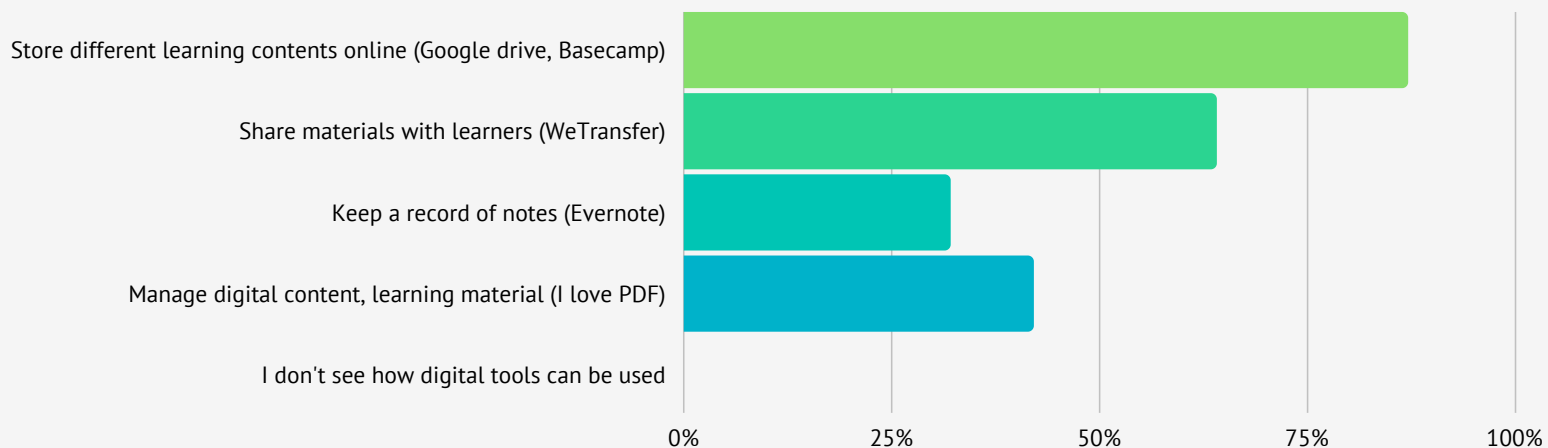
[13] Cf "Digital Pedagogy Cookbook" – Recipes "Use Basecamp as a Project Management System" or "Use OwnCloud as an Own Storage System for Learning Materials"
[14] Cf "Digital Pedagogy Cookbook" – Recipes "Use we-transfer to manage, protect and share digital resources"

Section 2: Teaching and learning

Also according to the European framework for trainers' digital competences, digital technologies can reinforce and improve teaching and learning strategies in different ways. However, regardless of the pedagogical strategy or approach chosen, the specific digital competence of the educator in the VET sector lies in the effective orchestration of the use of digital technologies in the different phases and settings of the learning process.

2.1) Teaching

Teaching is anything that relates to the design, planning and implementation of the use of digital technologies in the various stages of the learning process[15].
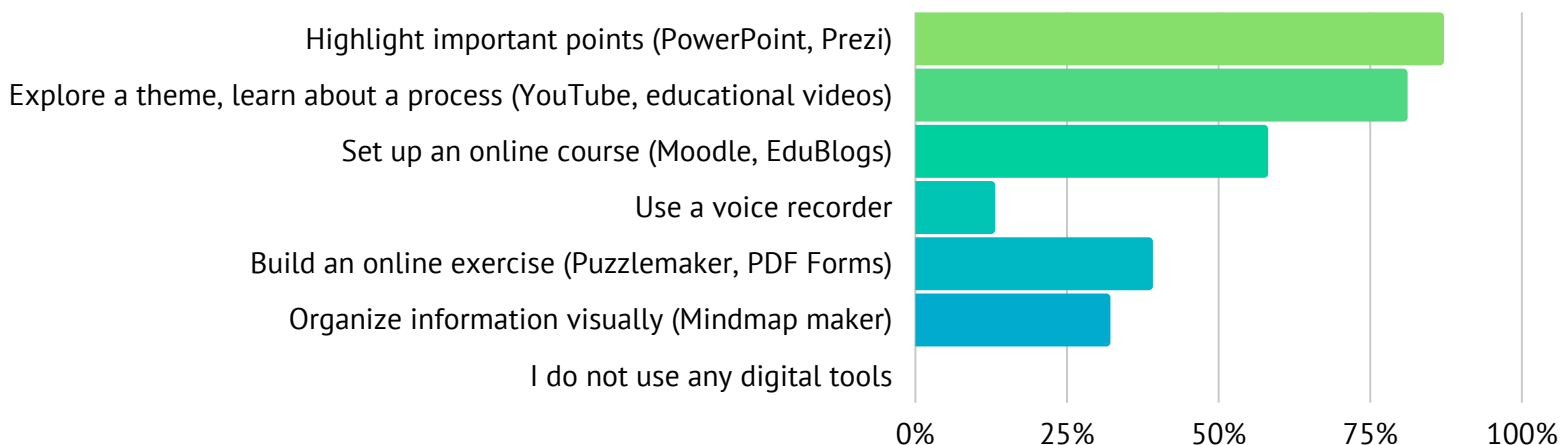
While for four out of five countries, applications (PowerPoint, Prezi) to highlight points for teaching are a widely used tool in the design, planning and use of digital resources, it is observable that in Spain it isn't so much so. In fact, it emerges from the answers given by Spanish professionals that tools such as YouTube[16] or Moodle[17] are unanimously the most popular tools for improving teaching effectiveness. PowerPoint or Prezi[18] is widely used (more than 85% of Spanish respondents say that this tool is useful) but not as much as the

85%

of Spanish respondents say that PowerPoint is useful
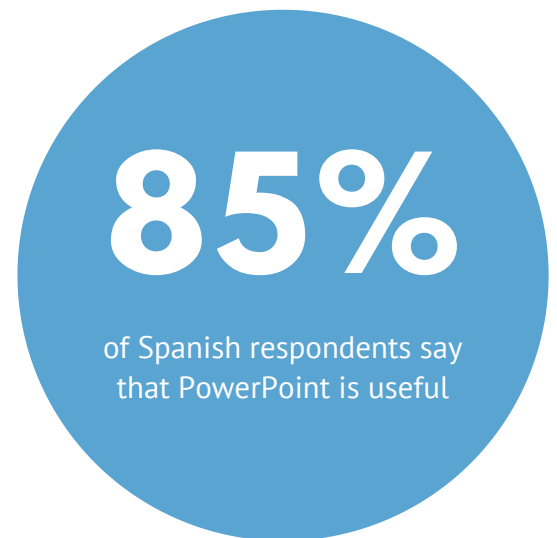
video or online course applications mentioned above.

Nonetheless, in general, the study shows a trend for the use of PowerPoint/Prezi even if other tools are used during training and teaching.

EXCHANGING THE EFFECTIVENESS OF A TEACHING PROCESS

Highlight important points (PowerPoint, Prezi)	~88%
Explore a theme, learn about a process (YouTube, educational videos)	~81%
Set up an online course (Moodle, EduBlogs)	~58%
Use a voice recorder	~13%
Build an online exercise (Puzzlemaker, PDF Forms)	~39%
Organize information visually (Mindmap maker)	~32%
I do not use any digital tools	0%

0%   25%   50%   75%   100%

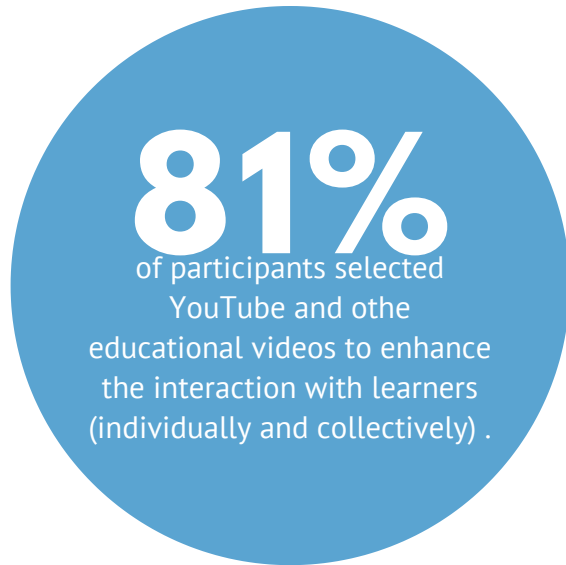[15] "European Framework for the Digital Competence of Educators – DigCompEdu", 2017, p.52-53.
[16] See "Digital Pedagogy Cookbook" – Recipes "Youtube licences, what does it mean for educational materials" or "Have students create original videos (given a specific topic) and upload to YouTube"
[17] Cf "Digital Pedagogy Cookbook" – Recipes "Use Moodle to create learning classes" or "Structure a course in moodle"
[18] Cf "Digital Pedagogy Cookbook" – Recipes "Create a visual, interrelated lesson plan on Prezi"
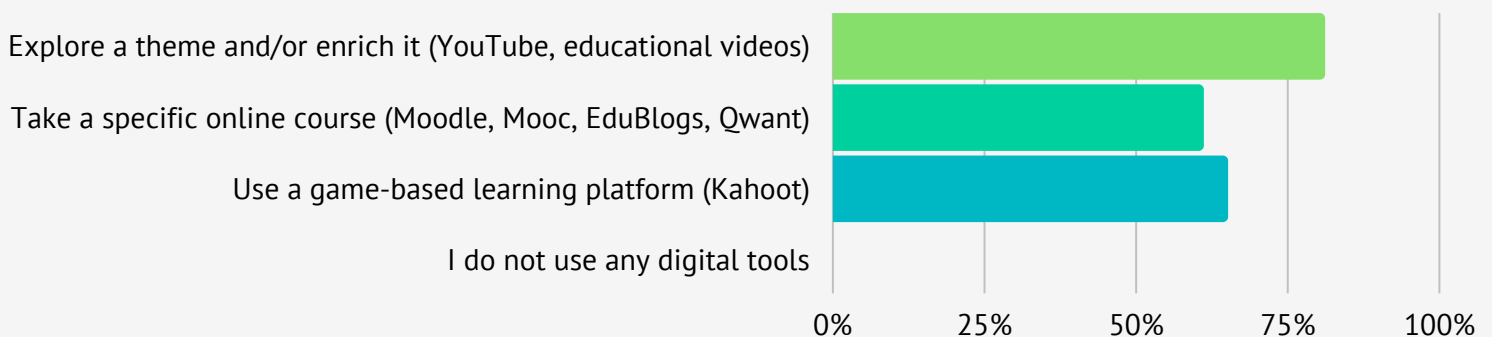
2.2) Guidance

81%
of participants selected YouTube and othe educational videos to enhance the interaction with learners (individually and collectively) .

Digitally literate educators must be able to devise new methods, supported by digital technologies, to provide guidance and support to learners, individually and collectively.

If all the participants in the survey believe that improving learner interaction is the main objective of using digital tools,[19] it's interesting to understand which tools are used by trainers to respond to it. Although the use of educational videos to explore and/or enrich a theme[20] represents a significant percentage of responses (25 favourable responses out of 31 participants), it can be observed that the responses to this question are shared among the different digital resources. This illustrates the fact that in order to achieve this objective of improving interaction with learners, professionals are trying to implement several methodologies and that there isn't a single answer to be given.

ENHANCING THE INTERACTION WITH LEARNERS (INDIVIDUALLY AND COLLECTIVELY)

Explore a theme and/or enrich it (YouTube, educational videos)

Take a specific online course (Moodle, Mooc, EduBlogs, Qwant)

Use a game-based learning platform (Kahoot)

I do not use any digital tools

0%   25%   50%   75%   100%

2.3) Collaborative learning

Collaborative learning is anything related to digital technologies that enables learners to use digital technologies in collaborative work, with the aim of improving communication, group work and collaborative knowledge creation. [21]

The majority of VET professionals uses networks to improve communication between themselves and learners. This is the highest response rate, with 87% of VET workers, or 27 out of 31 participants, saying they use these communication networks such as Facebook, Instagram, Skype...[22]

CREATING A COLLABORATIVE ASSIGNMENT AS A MEANS OF ENHANCING COMMUNICATION, COLLABORATION AND COLLABORATIVE KNOWLEDGE CREATION
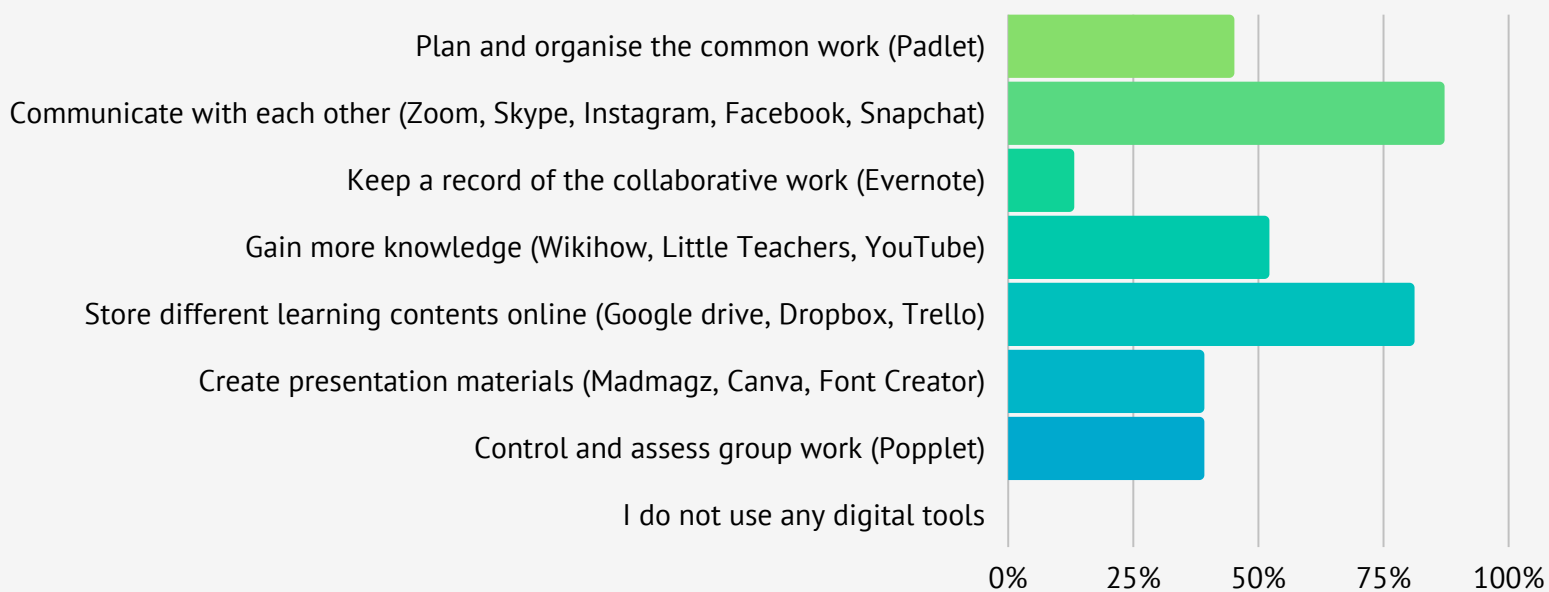
[21] "European Framework for the Digital Competence of Educators – DigCompEdu", 2017, p.56-57.
[22] See "Digital Pedagogy Cookbook" – Recipes "Use Facebook as a platform for creative work sharing", "Use Pinterest to store and share digital resources with learners" or "Use Twitter to create a group Mind Map by tracking #hashtags"

2.4) Self-regulated learning

With over 87% (27 out of 31 participants) confirming the use of digital resources such as YouTube or any other educational video,[23] survey participants answered the question on the methods used for so-called "self-regulated" learning. That is, the use of digital technologies to enable learners to plan, monitor and reflect on their own learning, provide evidence of progress, share ideas and find creative solutions.

In the course of the study, Spain, unlike the other four countries, demonstrated a high rate of use of digital tools such as Canva[24], Madmagz[25] allowing the creation of its own presentation or teaching material. These resources are also used in the other countries but to a lesser extent.

SUPPORTING SELF-REGULATED LEARNING PROCESSES
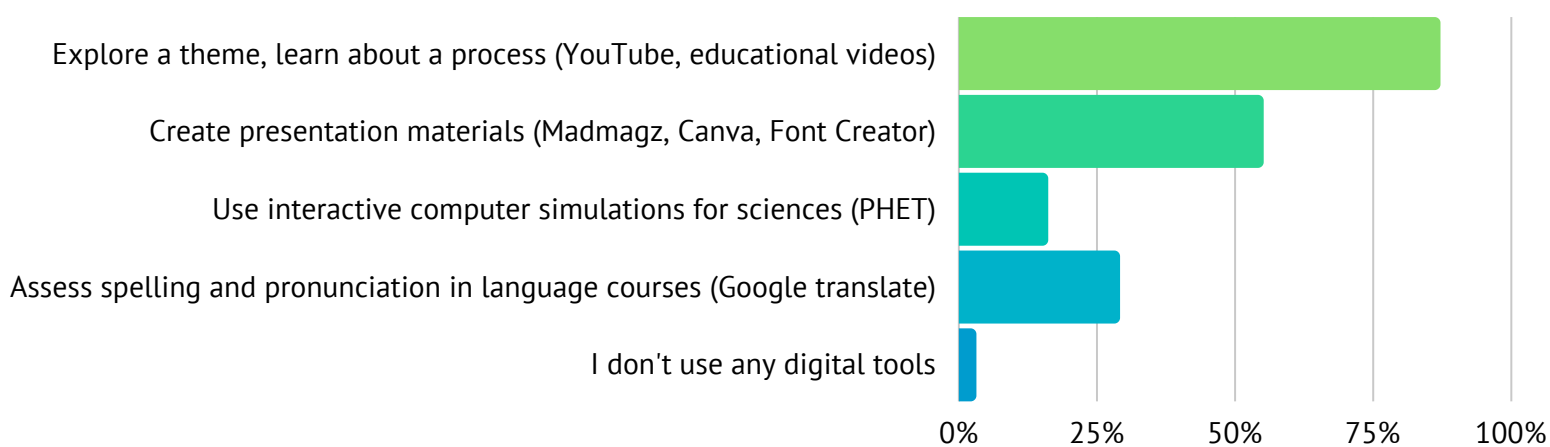
[23] Cf "Digital Pedagogy Cookbook" – Recipes "Increase student engagement in educational videos" or "Use Online Video casting as a Video Tool for Learners"

[24] See "Digital Pedagogy Cookbook" – Recipes "Use Canva to build social media presence, how to make engaging posts and share" or "Expressive Training with Canva"

[25] Cf "Digital Pedagogy Cookbook" – Recipe "Create an online magazine with students using Madmagz"

Section 3: Assessment

When integrating digital technology into learning and teaching, it may be necessary to consider how technologies can improve existing assessment strategies. At the same time, it may be interesting to see how they can be used to create or facilitate innovative assessment approaches.

Digital technologies can help to directly monitor the progress of learners, making it easier and more convenient for educators to evaluate and adapt their teaching strategies.

3.1) Assessment strategies, analysing of evidence, feedback and planning

USING DIGITAL TECHNOLOGIES FOR FORMATIVE AND SUMMATIVE ASSESSMENTS
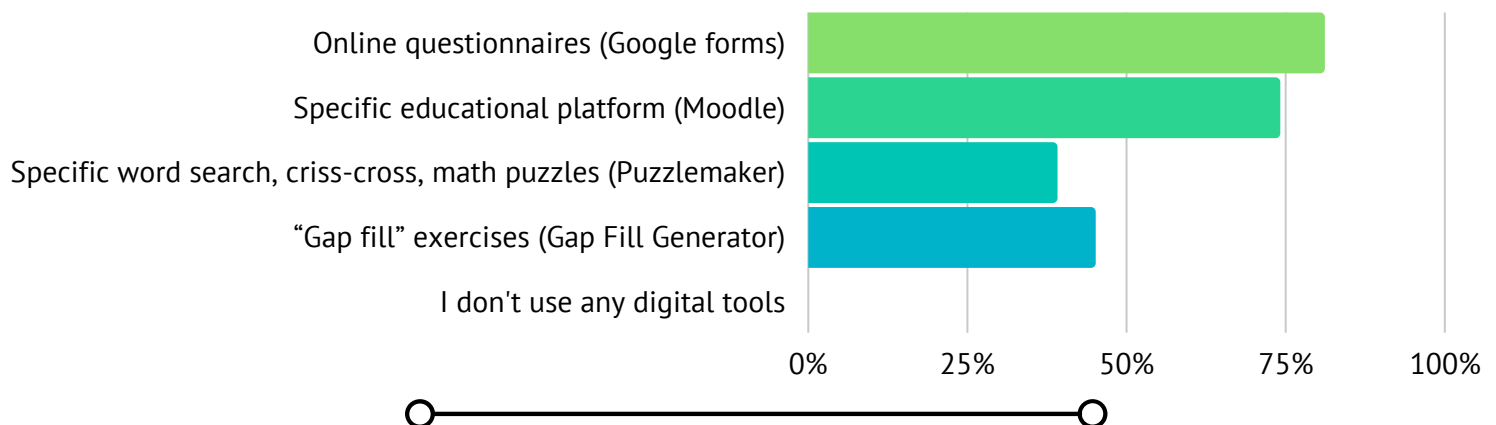
The objective of the strategy is to use digital technologies for evaluation in order to increase the diversity and relevance of evaluation formats and approaches through, for example, Google Forms (81%)[26] or platforms such as Moodle (74%)[27]. The latter two tools are the most widespread and used in the five project partner countries. The difference in responses between the two types of tools (one being an online questionnaire and the other a specific educational platform) is very small (25 respondents for the use of Google Forms versus 23 positive responses for Moodle). These two tools are the most dominant in the evaluation strategies of VET professionals.

[26] See "Digital Pedagogy Cookbook" – Recipe "Create a self-marking test on Google Forms, which gives pre-written feedback"
[27] Cf "Digital Pedagogy Cookbook" – Recipes "Use Moodle's feedback activity to provide personal feedback and offer differentiated support to learners" or "Create a 'gap fill' exercise for students to complete on Moodle."

These professionally selected resources also allow professionals to analyse the data collected and to better evaluate teaching and learning. They also provide targeted and timely feedback to learners. In addition, they enable teaching strategies to be adapted and targeted support to be provided, based on the evidence generated by the digital technologies used (here Moodle[28] and Google Forms[29] at over 74% and 81%). These different tools promote understanding of the information provided to learners and their parents by digital technologies.

PROVIDING TARGETED AND TIMELY FEEDBACK TO LEARNERS FOR ADAPTING TEACHING STRATEGIES
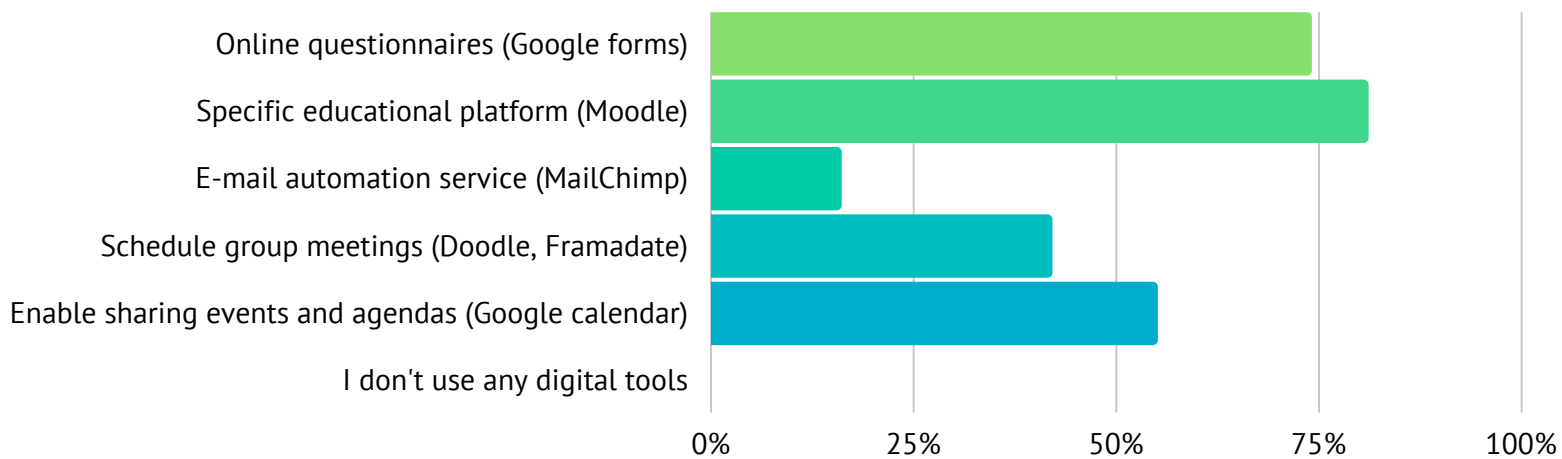
SHARING EXPERIENCE

"In my own teaching, I use a social media platform for formative and summative assessment with which learners (many of whom don't have sophisticated digital skills) eg FaceBook. Send me a photo; ask me a question.... and I'll respond. If stuck, I'll use a Zoom session to support one-to-one or group work...focused on a specific issue. This is especially the case during lockdown. I have had a very high level of learner engagement and clear evidence of progress and achievement."

Elisabeth from United Kingdom

[28] See "Digital Pedagogy Cookbook" – Recipes "Structure a course in Moodle" or "Use learning analytics to monitor students' behavior in Moodle"
[29] Cf "Digital Pedagogy Cookbook" – Recipe "Create a self-marking test on Google Forms, which gives pre-written feedback" or "Use Google Forms for Creating Evaluation"
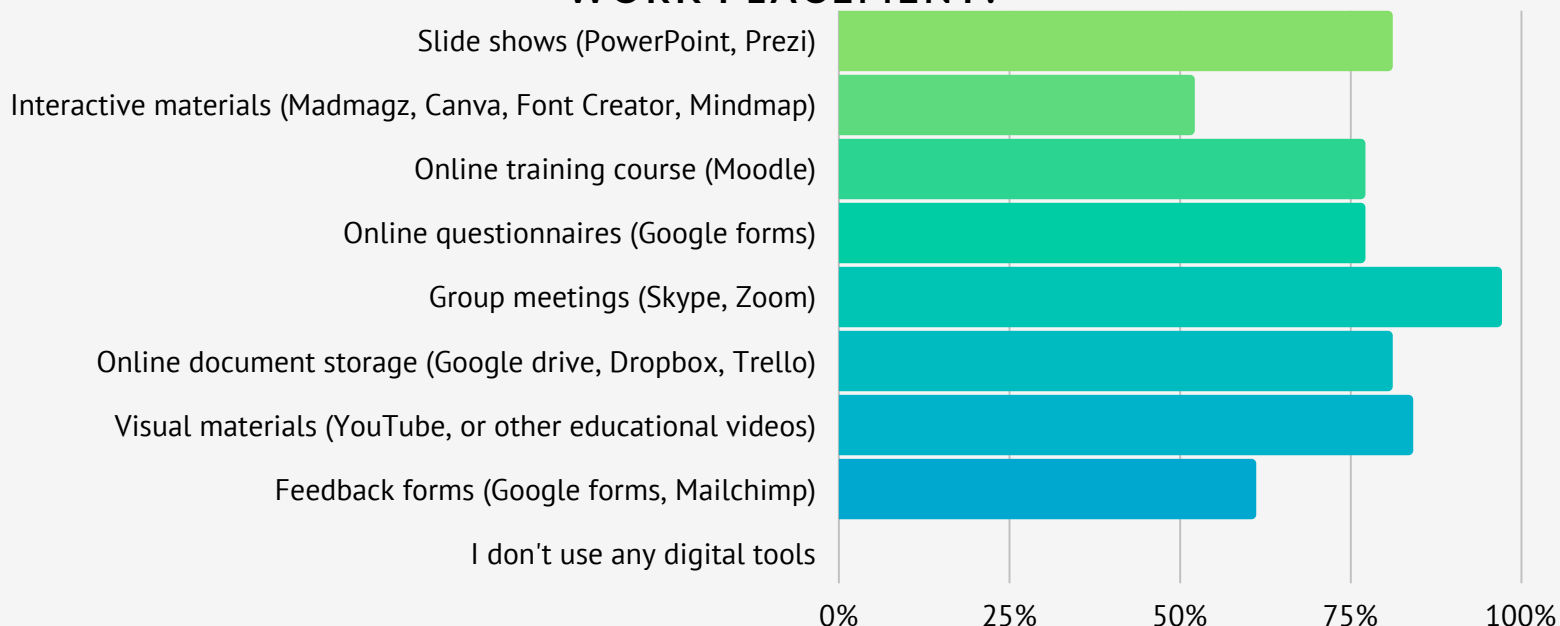
Section 4: Empowering learners

One of the main strengths of digital technologies in education is its ability to initiate learner-centred pedagogical strategies and to facilitate the active engagement of learners, e.g. when exploring a topic, experimenting with different options or solutions, understanding connections, proposing creative solutions or creating content.

4.1) Accessibility and inclusion

During the Digital Pedagogy Cookbook project, it was noted that it's essential to ensure accessibility to learning resources and activities for all learners, including those with special needs. In this context, 97% of the VET professionals surveyed identified meeting tools such as Zoom or Skype[30] as the tools to be used during a work placement abroad, followed by educational videos, online storage tools (Google drive, Dropbox, Trello)[31] and digital presentation resources (Power Point and Prezi)[32]. The advantage of Zoom or Skype is that it brings together a larger world whether they're in the same region or in another country.

97%

of the VET professionals surveyed identified meeting tools such as Zoom or Skype as the tools to be used during a work placement abroad.

WHAT KIND OF DIGITAL TOOLS COULD BE USED DURING A WORK PLACEMENT?

Slide shows (PowerPoint, Prezi)
Interactive materials (Madmagz, Canva, Font Creator, Mindmap)
Online training course (Moodle)
Online questionnaires (Google forms)
Group meetings (Skype, Zoom)
Online document storage (Google drive, Dropbox, Trello)
Visual materials (YouTube, or other educational videos)
Feedback forms (Google forms, Mailchimp)
I don't use any digital tools

0%   25%   50%   75%   100%

[30] See "Digital Pedagogy Cookbook" – Recipes "Use Zoom to role-play job interviews" or "Use GoToWebinar for an Online Seminar"
[31] Cf "Digital Pedagogy Cookbook" – Recipes "Use NextCloud as an Own Storage System for Learning Materials" or "Using Trello to Fostering Learning Collaboration & Communication between students"
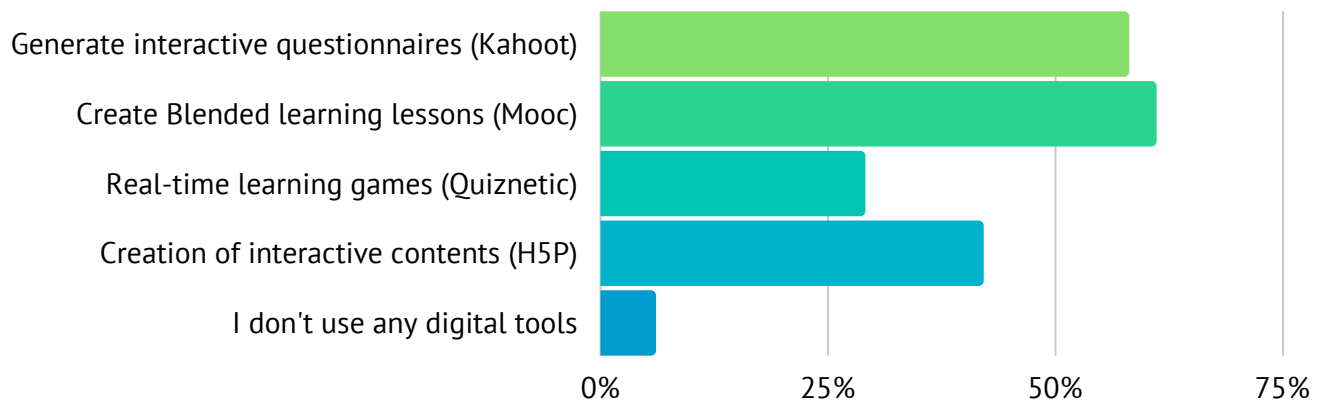[32] See "Digital pedagogy Cookbook" – Recipe "Create a visual, interrelated lesson plan on Prezi"

4.2) Differentiation and personalisation

The use of digital technologies responds to the diverse learning needs of learners, allowing them to progress at different levels and rates and to follow individual learning paths and objectives. The use of interactive questionnaires (Kahoot[33]) and the application of online courses (Mooc[34]) are ways identified by VET professionals to promote learning at the individual's ownrate and according to their own objectives.

ADDRESSING LEARNERS' DIVERSE LEARNING NEEDS BY ALLOWING LEARNERS TO ADVANCE AT DIFFERENT LEVELS AND SPEEDS AND TO FOLLOW INDIVIDUAL LEARNING PATHWAYS AND OBJECTIVES

[33] See "Digital Pedagogy Cookbook" – Recipes "Have students create own Kahoots related to the current topic (find own pictures, form questions)" or "Using Kahoot for Light-hearted Tests"
[34] Cf "Digital Pedagogy Cookbook" – Recipe "Create a Blended Learning lesson using online resources to develop grammar and vocabulary exercises for homework"

4.3) Actively engaging learners

Digital learning resources such as YouTube, Canva or Prezi are identified by VET professionals as tools that foster cross-curricular skills, in-depth reflection and creative expression of learners. Slido[35] and Mentimeter[36] are also identified by 70% of them as a tool that involves learners themselves in practical activities and increases their active participation in the understanding of complex subjects.

OPENING UP LEARNING TO NEW, REAL-WORLD CONTEXTS, WHICH INVOLVE LEARNERS THEMSELVES IN HANDS-ON ACTIVITIES, SCIENTIFIC INVESTIGATION OR COMPLEX PROBLEM SOLVING
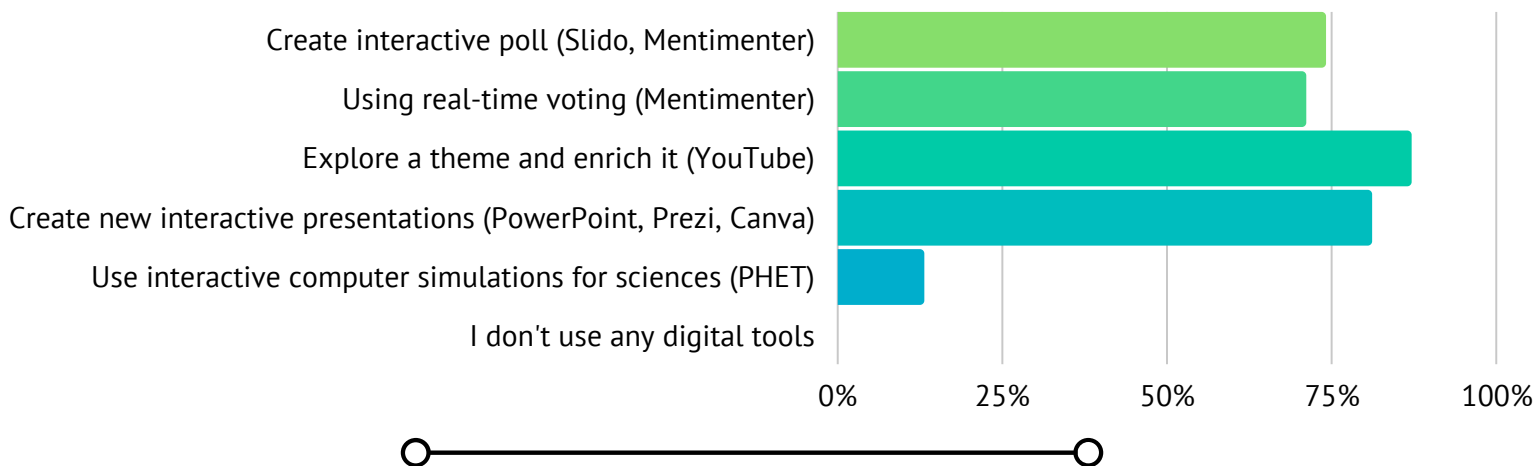
SHARING EXPERIENCE

"The teaching platforms (Moodle) allow students to follow their progress, both personally and in groups, with a forum, chat... In addition, the use of tools for synchronous monitoring, such as Zoom and Skype, is very interesting to share ideas and progress of the group and thus make a collaborative learning and group."

Alba from Spain

[35] Cf "Digital Pedagogy Cookbook" – Recipe "How to create an interactive poll with Sli.do using Smartphones"
[36] See "Digital Pedagogy Cookbook" – Recipe "Create an interactive and engaging presentation with Mentimeter"

Testimonies of VET professionals

"I have been working as a teacher of German as a foreign language for six years. I mainly work with migrant adults or youths. Even though there is always a textbook to use, I find that learners often enjoy online activities such as quizzes or other games which make the classes more fun and are more motivating than traditional exercises. In addition, many learners appreciate the chance to learn more autonomously through online tools or to be able to continue learning after class or during holidays when there are no classes. I think as in any other job, you have to adapt to changes and as a teacher that means adapting to the fact that learning does not necessarily take place in a classroom only.

However, I wouldn't consider myself an expert in online tools especially not when it comes to creating any tools for the learners myself. Therefore, it's good that there is the collection of 'recipes' to show how online tools can be used and how to create the tools. I also found it very interesting to find out there was a framework for classifying digital skills and to find out which level I was and where there are areas for improvement."

Jessica, teacher of German

"I work at a language school as a teacher, teacher and developer of media offers. I am in contact with very heterogeneous groups in terms of age, language, level of education. I use different tools almost every day to organize and carry out my work. I recently discovered Citavi and Evernote for myself. The two tools do a good job in knowledge management. I recommend everyone to take part in various advanced training courses every now and then, even to look for new opportunities for yourself, maybe to complete a MOOC."

Anna, teacher and developer of media offers

CONCLUSION

In order to obtain information on the use of digital pedagogy in the daily work of a teacher and trainer in the VET sector, the following questions were asked to professionals:

"In different learning situations, what types of tools are suitable for VET courses? »

Although the diversity of objectives, size of structures, experience and habits is certain, the types of tools suitable for VET training are similar across the five project partner countries: France, Germany, Greece, Spain and the United Kingdom.

Moreover, this survey of 31 professionals shows that the objectives of using digital tools are almost identical: to improve interaction with learners, to organize digital content and make it available to learners, and to meet the various needs of learners.

Although several tools were identified and highlighted during this study, some digital resources such as Quiznetic[37], H5P[38], Competences+[39] are rarely/seldom selected by professionals because they are less or not known. Their use is more complicated for VET professionals, who point out that improving knowledge of digital tools should be done through specific training and practice. This is why the recipe book created by the project partners responds to this demand by promoting the training of professionals on the concrete use of the chosen digital tool.

[37] See "Digital Pedagogy Cookbook" – Recipe "Use Quiznetic to make a set of questions and build your own themed revision game"
[38] Cf "Digital Pedagogy Cookbook" – Recipes "Use H5P to offer interactive learning opportunities" or "Use h5p dictation for language assessment"
[39] See "Digital Pedagogy Cookbook" – Recipes "Use competences+ app to create a dynamic resume" or "How to encourage personal and professional skills self-assessment using an online platform "Competences+""