Boosting Classes 2.0 for high-quality teaching in adult education

Ref. 2020-1-IT02-KA204-079329

Report on digital skills and technologies in adult education

COUNTRY Spain

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Elaborated by	CEPA Casa de la Cultura (Getafe – Spain)
Activity related	**O1/A1 -** Analyzing and comparing the teaching and learning approaches. **O1/A2** - Identification and mapping of the digital skills required for the integration of the technology into the classes for adult education at the national level. **O1/A3 -** Analyzing and comparing the assessment and evaluation systems in distance learning (formative and summative) through the specific tools and techniques at national level.
Deliverable No. and title	**O1 - Framework to integrate new technologies in adult education through project based learning**

Contents

INTRODUCTION. Quantitative data collected.

This survey was conducted between January 15 and 20, 2021. Only quantitative responses are collected in this report. The qualitative ones are explained in the report.

26 teachers have responded to the survey, who 20 are women and 6 are men.

According to the level of teaching:

- 5 teachers are from Initial Education.
- 9 of Basic Vocational Training (*FPB*)
- 12 of Secondary Education.

By specialty:

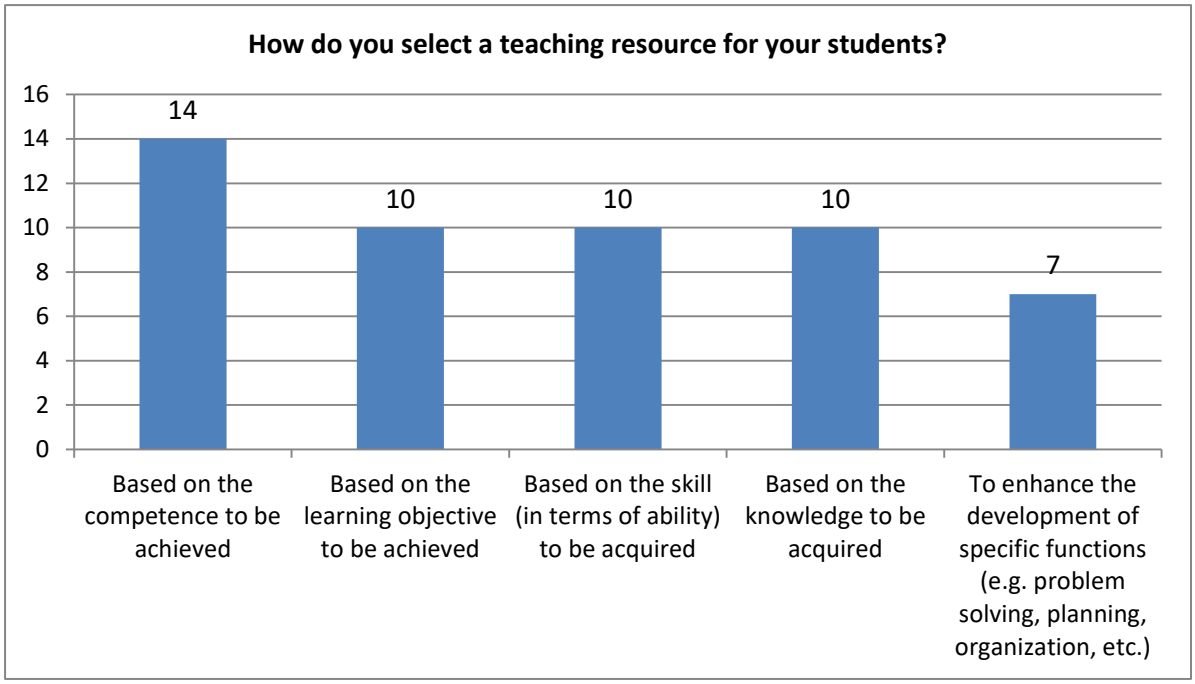
- 5 are teachers in Initial Education.
- 5 are FPB technicians.
- 6 are professors in the scientific field (5 in secondary Education and 1 in FPB).
- 3 are teachers in the Social Field (2 in secondary Education and 1 in FPB).
- 6 are teachers of the linguistic field (5 of Secondary Education and 1 of FPB).
- 1 school counselor.

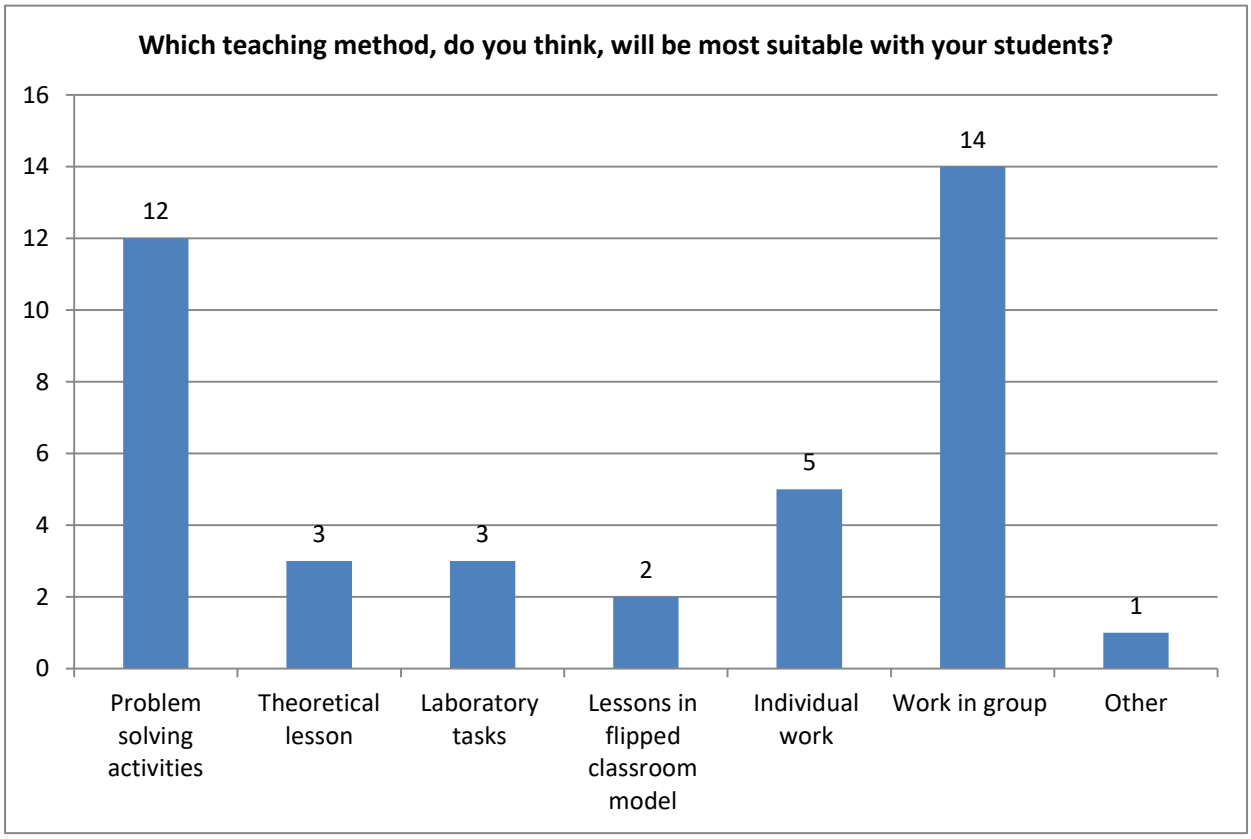
According to the years in teaching:

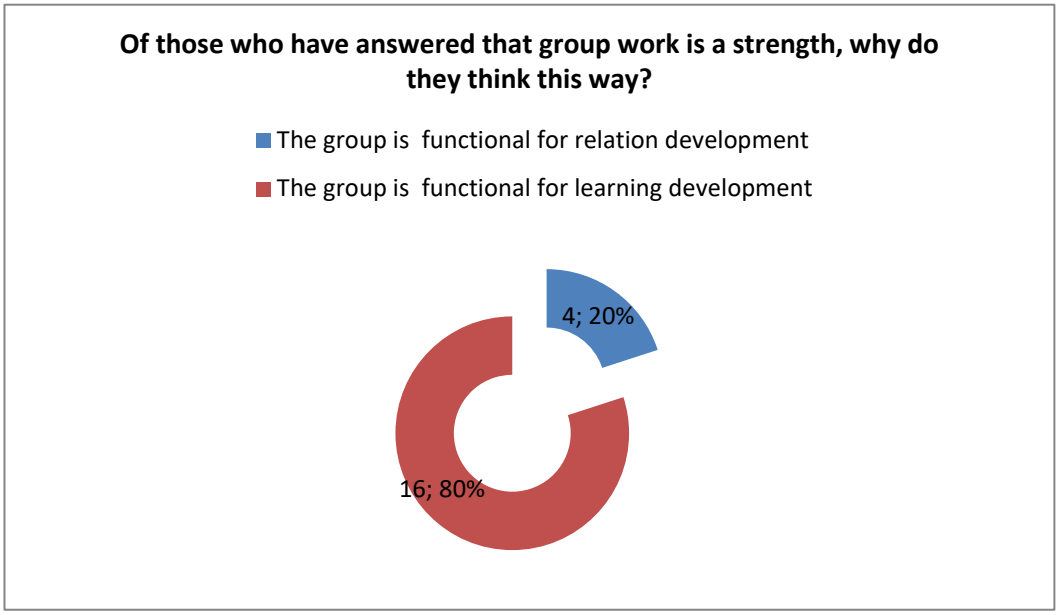
- 17 teachers have been teaching for more than 10 years.
- 4 teachers have been teaching between 6 and 10 years.
- 5 teachers have been teaching 5 years or less.

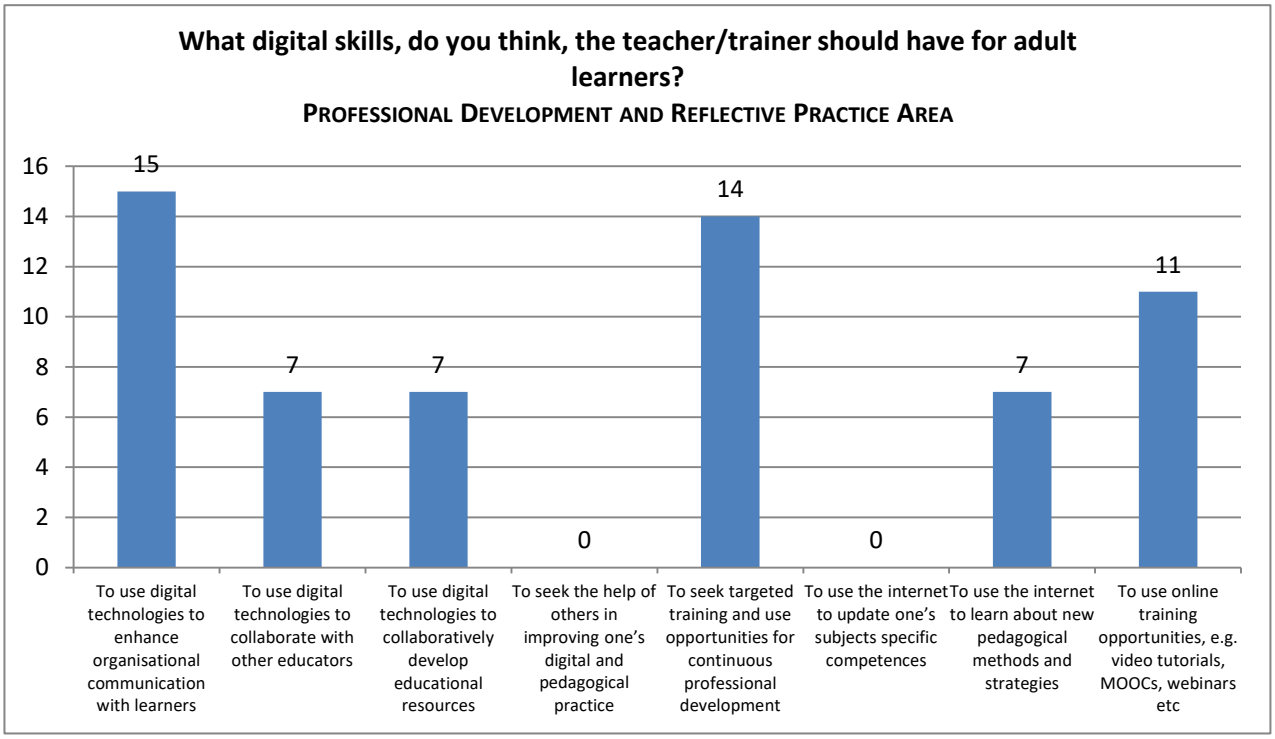
The 26 teachers use digital tools for their activity.

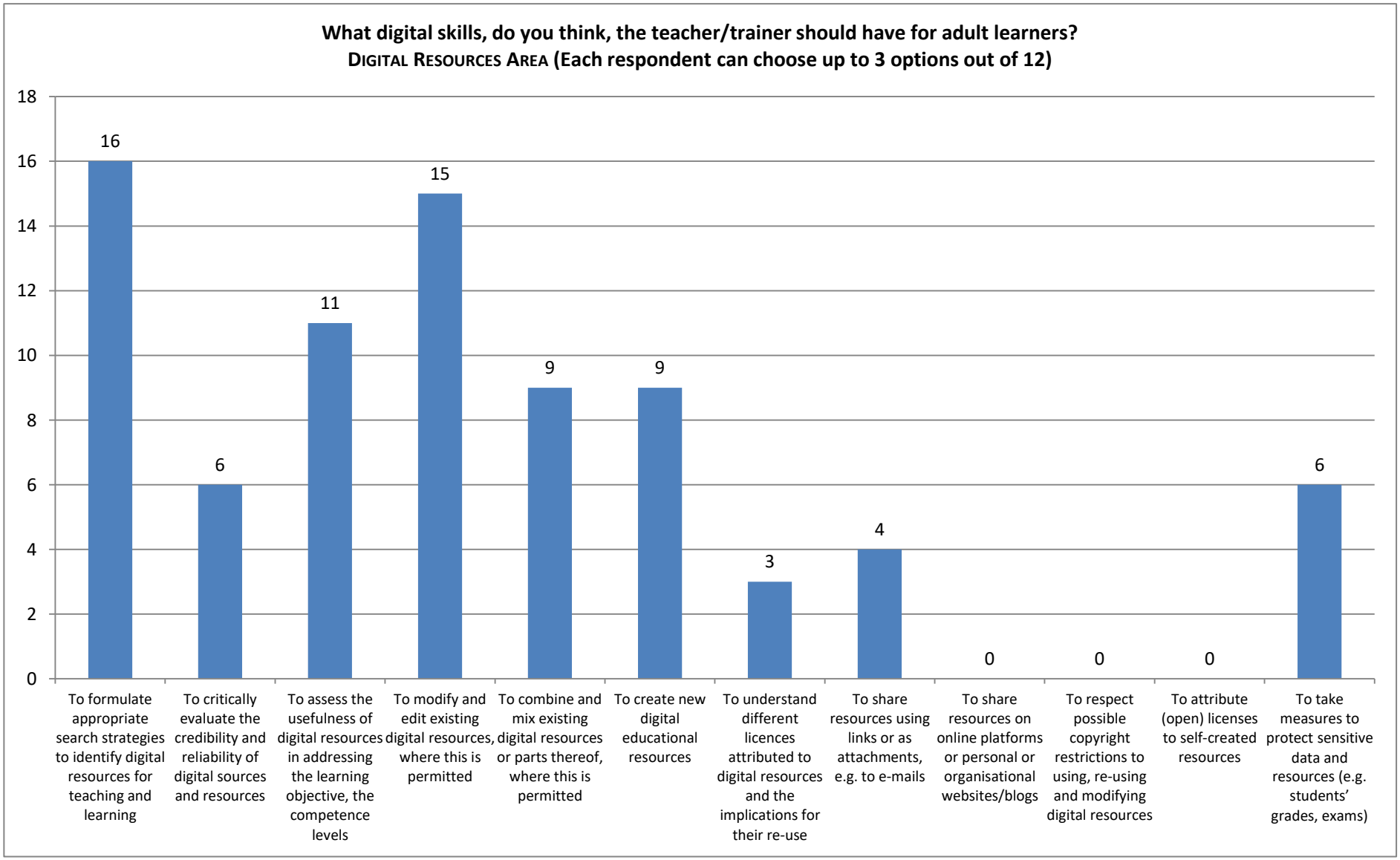
The 26 teachers organize self-study activities (individual work) for their students.


How do you select a teaching resource for your students?
16
14
12
10
8
6
4
2
0
14
10
10
10
7
Based on the competence to be achieved
Based on the learning objective to be achieved
Based on the skill (in terms of ability) to be acquired
Based on the knowledge to be acquired
To enhance the development of specific functions (e.g. problem solving, planning, organization, etc.)

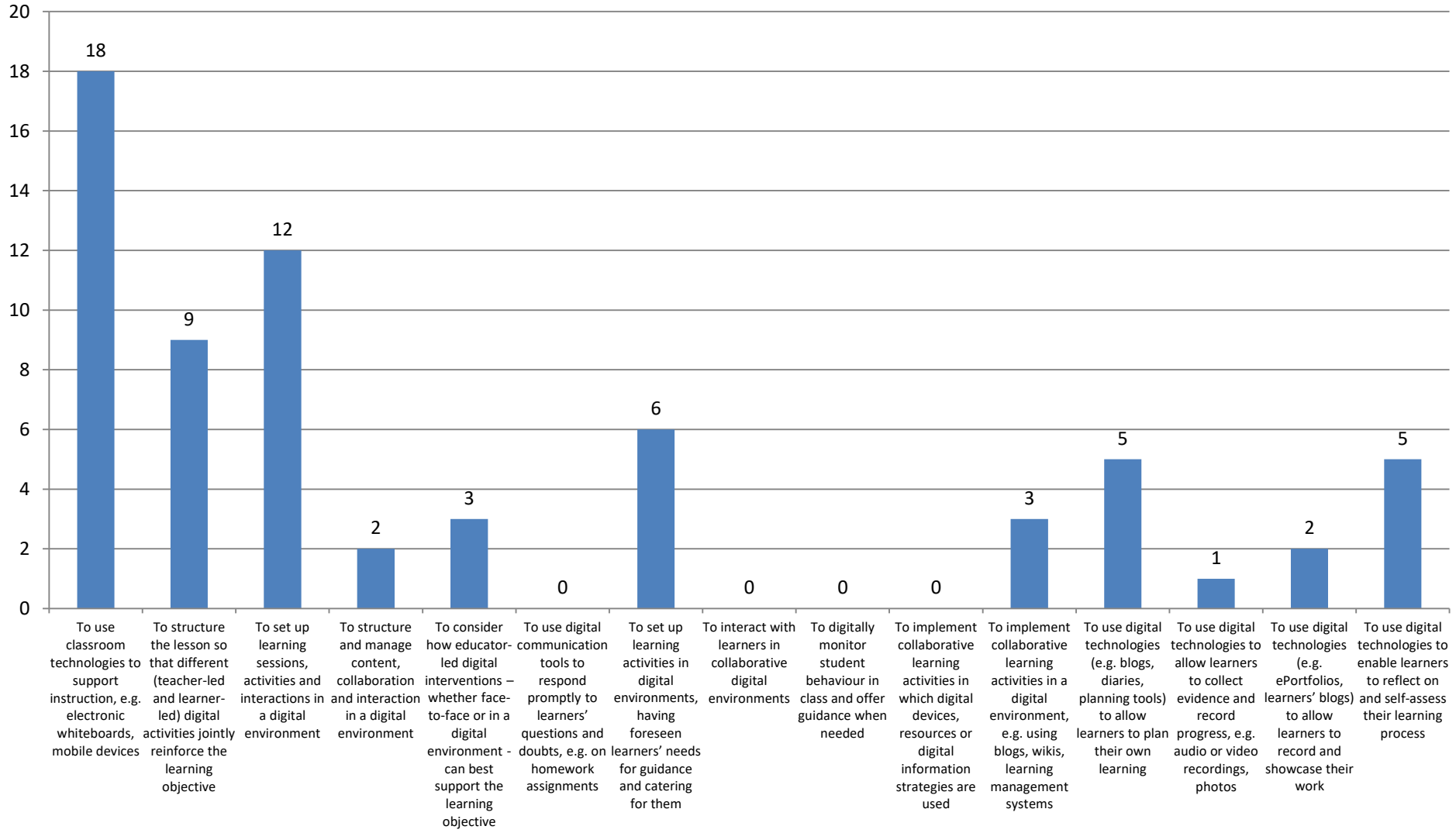

Which teaching method, do you think, will be most suitable with your students?
16
14
12
10
8
6
4
2
0
12
3
3
2
5
14
1
Problem solving activities
Theoretical lesson
Laboratory tasks
Lessons in flipped classroom model
Individual work
Work in group
Other

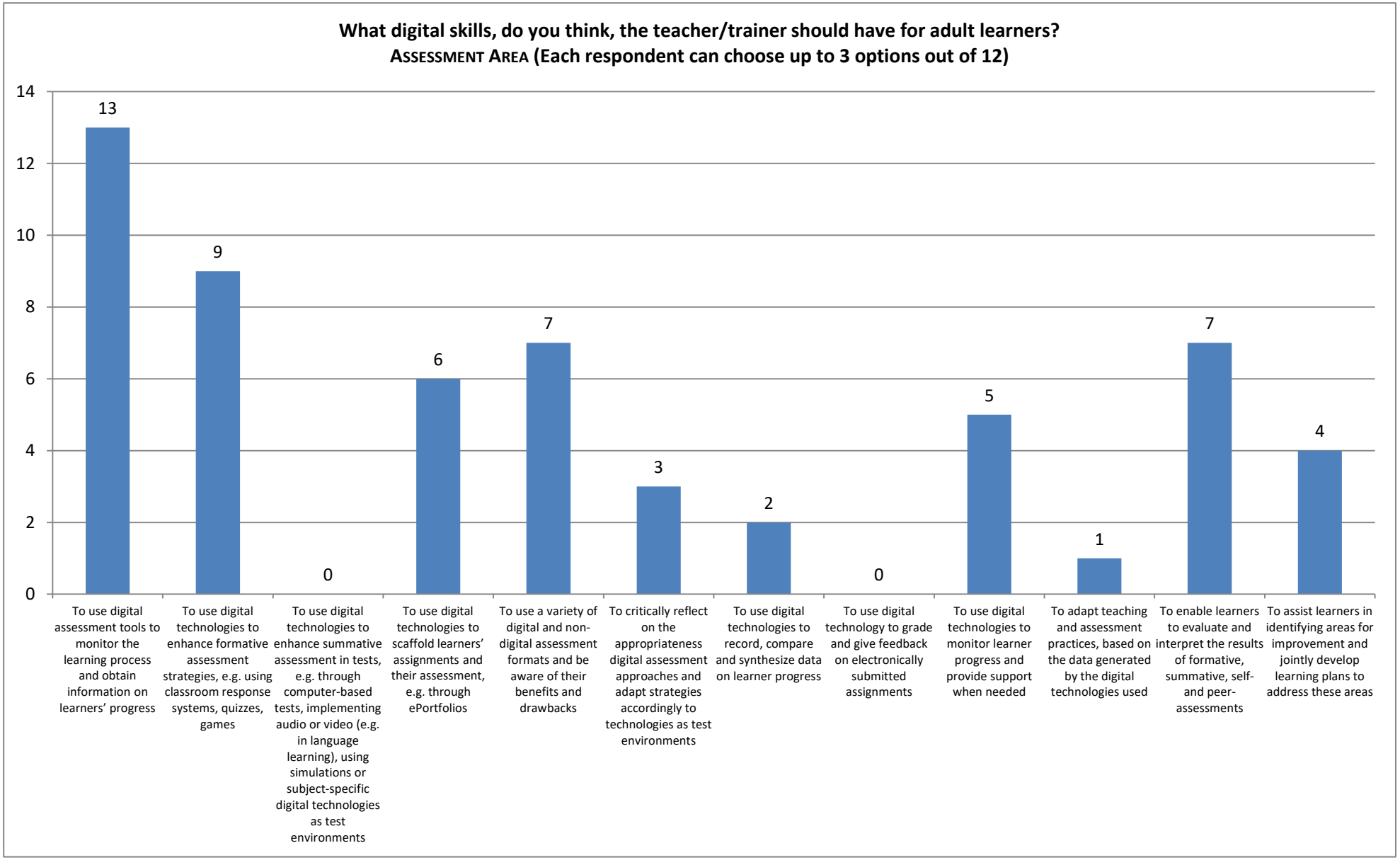

Of those who have answered that group work is a strength, why do they think this way?
The group is functional for relation development
The group is functional for learning development
4; 20%
16; 80%

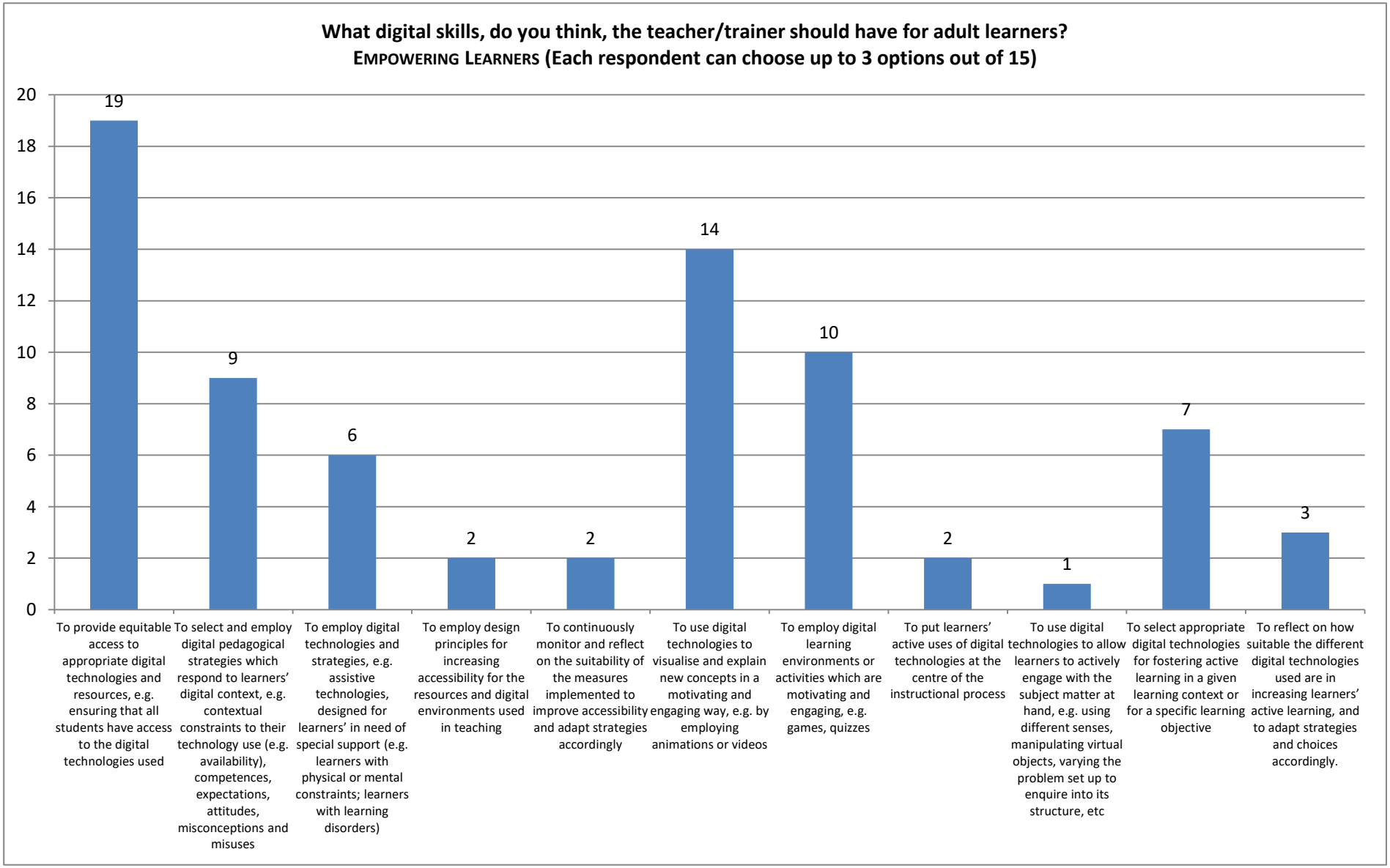

What digital skills, do you think, the teacher/trainer should have for adult learners?
PROFESSIONAL DEVELOPMENT AND REFLECTIVE PRACTICE AREA
16
14
12
10
8
6
4
2
0
15
7
7
0
14
0
7
11
To use digital technologies to enhance organisational communication with learners
To use digital technologies to collaborate with other educators
To use digital technologies to collaboratively develop educational resources
To seek the help of others in improving one's digital and pedagogical practice
To seek targeted training and use opportunities for continuous professional development
To use the internet to update one's subjects specific competences
To use the internet to learn about new pedagogical methods and strategies
To use online training opportunities, e.g. video tutorials, MOOCs, webinars etc

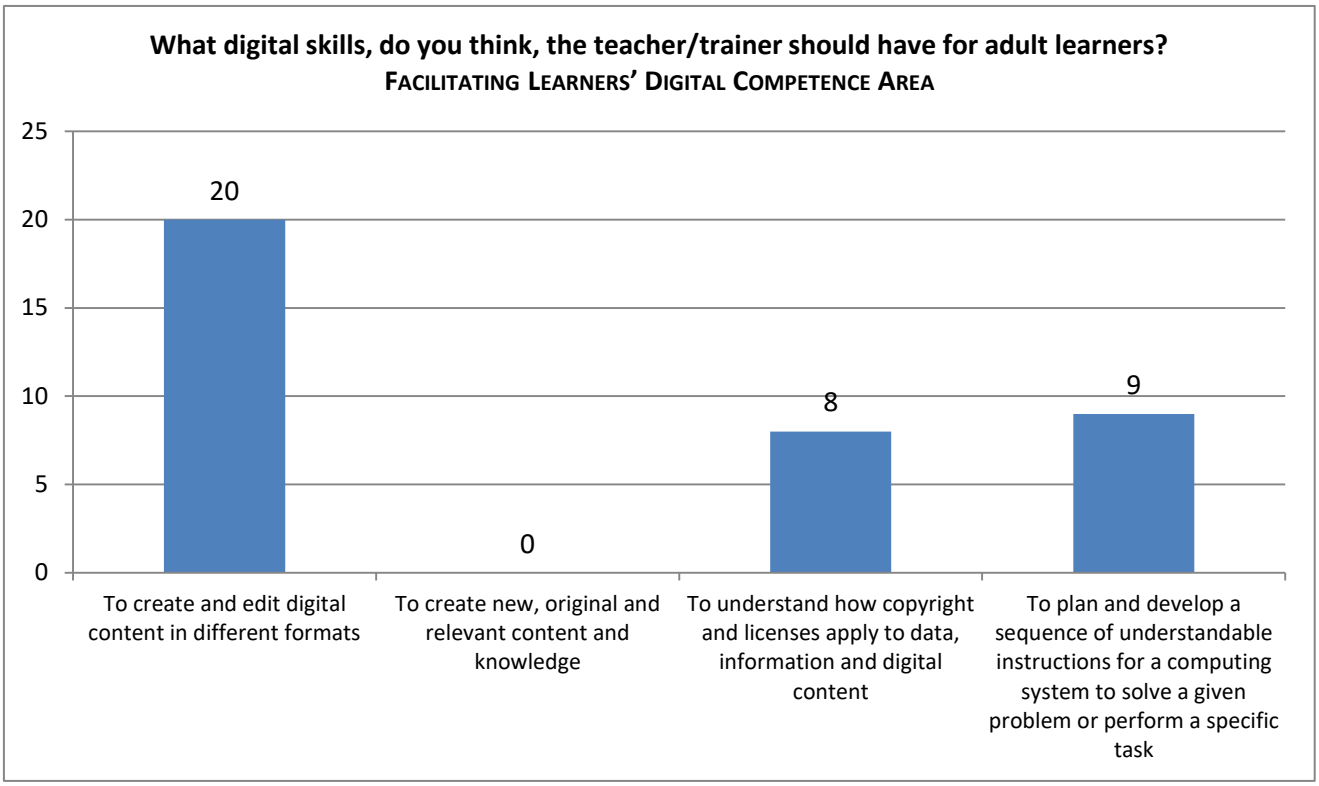

What digital skills, do you think, the teacher/trainer should have for adult learners?
DIGITAL RESOURCES AREA (Each respondent can choose up to 3 options out of 12)
18
16
14
12
10
8
6
4
2
0
16
6
11
15
9
9
3
4
0
0
0
6
To formulate appropriate search strategies to identify digital resources for teaching and learning
To critically evaluate the credibility and reliability of digital sources and resources
To assess the usefulness of digital resources in addressing the learning objective, the competence levels
To modify and edit existing digital resources, where this is permitted
To combine and mix existing digital resources or parts thereof, where this is permitted
To create new digital educational resources
To understand different licences attributed to digital resources and the implications for their re-use
To share resources using links or as attachments, e.g. to e-mails
To share resources on online platforms or personal or organisational websites/blogs
To respect possible copyright restrictions to using, re-using and modifying digital resources
To attribute (open) licenses to self-created resources
To take measures to protect sensitive data and resources (e.g. students' grades, exams)

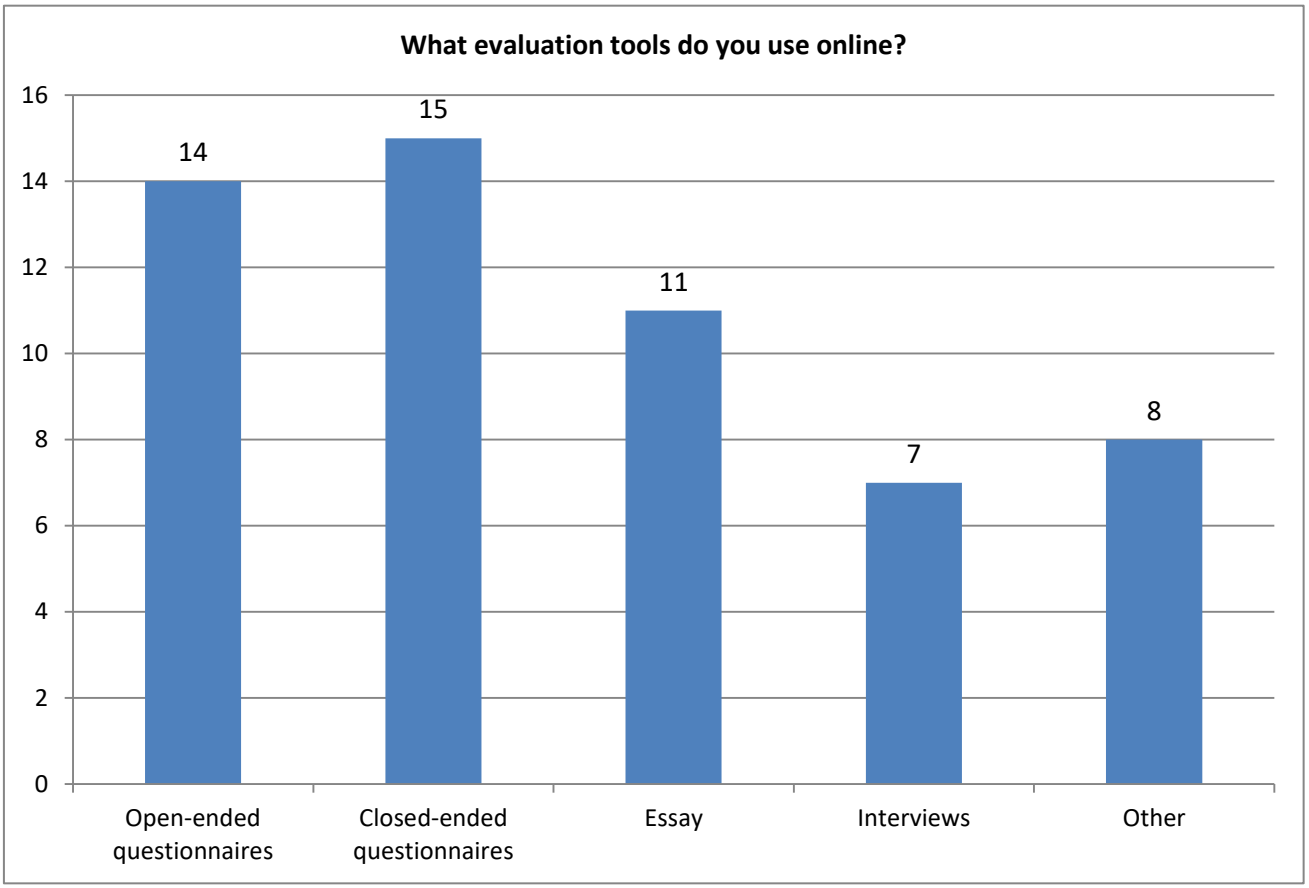
What digital skills, do you think, the teacher/trainer should have for adult learners?
TEACHING AND LEARNING AREA (Each respondent can choose up to 3 options out of 15)



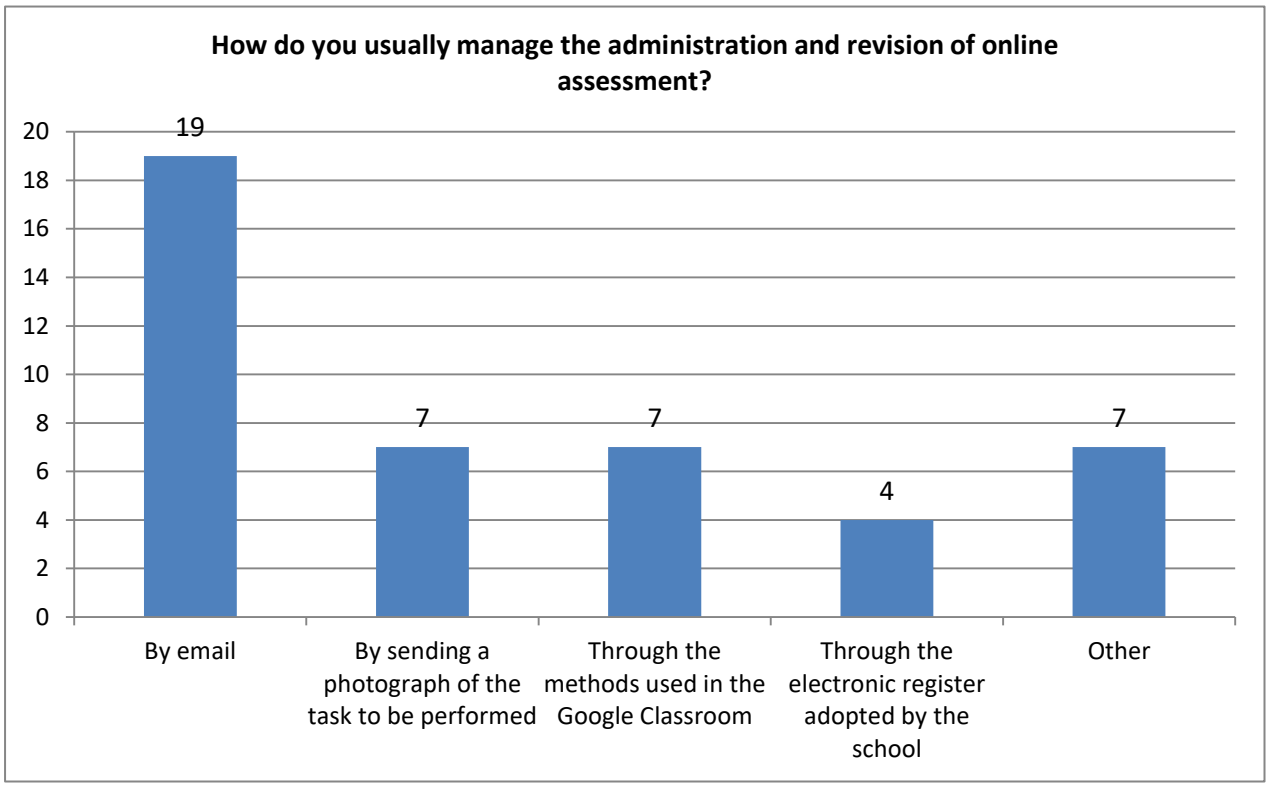

What digital skills, do you think, the teacher/trainer should have for adult learners?
ASSESSMENT AREA (Each respondent can choose up to 3 options out of 12)
14
12
10
8
6
4
2
0
13
9
0
6
7
3
2
0
5
1
7
4
To use digital assessment tools to monitor the learning process and obtain information on learners' progress
To use digital technologies to enhance formative assessment strategies, e.g. using classroom response systems, quizzes, games
To use digital technologies to enhance summative assessment in tests, e.g. through computer-based tests, implementing audio or video (e.g. in language learning), using simulations or subject-specific digital technologies as test environments
To use digital technologies to scaffold learners' assignments and their assessment, e.g. through ePortfolios
To use a variety of digital and non-digital assessment formats and be aware of their benefits and drawbacks
To critically reflect on the appropriateness digital assessment approaches and adapt strategies accordingly to technologies as test environments
To use digital technologies to record, compare and synthesize data on learner progress
To use digital technology to grade and give feedback on electronically submitted assignments
To use digital technologies to monitor learner progress and provide support when needed
To adapt teaching and assessment practices, based on the data generated by the digital technologies used
To enable learners to evaluate and interpret the results of formative, summative, self- and peer-assessments
To assist learners in identifying areas for improvement and jointly develop learning plans to address these areas


What digital skills, do you think, the teacher/trainer should have for adult learners?
EMPOWERING LEARNERS (Each respondent can choose up to 3 options out of 15)
20
18
16
14
12
10
8
6
4
2
0
19
9
6
2
2
14
10
2
1
7
3
To provide equitable access to appropriate digital technologies and resources, e.g. ensuring that all students have access to the digital technologies used
To select and employ digital pedagogical strategies which respond to learners' digital context, e.g. contextual constraints to their technology use (e.g. availability), competences, expectations, attitudes, misconceptions and misuses
To employ digital technologies and strategies, e.g. assistive technologies, designed for learners' in need of special support (e.g. learners with physical or mental constraints; learners with learning disorders)
To employ design principles for increasing accessibility for the resources and digital environments used in teaching
To continuously monitor and reflect on the suitability of the measures implemented to improve accessibility and adapt strategies accordingly
To use digital technologies to visualise and explain new concepts in a motivating and engaging way, e.g. by employing animations or videos
To employ digital learning environments or activities which are motivating and engaging, e.g. games, quizzes
To put learners' active uses of digital technologies at the centre of the instructional process
To use digital technologies to allow learners to actively engage with the subject matter at hand, e.g. using different senses, manipulating virtual objects, varying the problem set up to enquire into its structure, etc
To select appropriate digital technologies for fostering active learning in a given learning context or for a specific learning objective
To reflect on how suitable the different digital technologies used are in increasing learners' active learning, and to adapt strategies and choices accordingly.


What digital skills, do you think, the teacher/trainer should have for adult learners?
FACILITATING LEARNERS' DIGITAL COMPETENCE AREA
25
20
15
10
5
0
20
0
8
9
To create and edit digital content in different formats
To create new, original and relevant content and knowledge
To understand how copyright and licenses apply to data, information and digital content
To plan and develop a sequence of understandable instructions for a computing system to solve a given problem or perform a specific task


What evaluation tools do you use online?
16
14
12
10
8
6
4
2
0
14
15
11
7
8
Open-ended questionnaires
Closed-ended questionnaires
Essay
Interviews
Other

Having answered "other" in the question "*What online assessment tools do you use?*" (previous graph), when it's specified specify which one, there are 4 mentions to the observation of problem solving in class or short tests, 2 mentions to Kahoot, 2 mentions to research papers and 1 annwer mentioning Cisco.



Having answered "other" in the question *How do you normally manage the administration and review of the online evaluation?* (previous graph), when it's specified which one, there are 7 mentions to the EducaMadrid Virtual Classroom and 1 to phone interviews.

1. Teaching-learning methodologies for the use of technologies in class in adult education in Spain

The regulations in force in Spain define the didactic methodology as the set of strategies, procedures and actions organized and planned by teachers, in a conscious and reflective way, in order to enable students to learn and achieve the objectives set.

Currently, the methodologies used in the classroom are aimed at students acquiring the necessary skills to carry out theory into practice and, in addition, be able to apply the knowledge learned in their daily lives and, in the future, in the workplace . Thus, as the Order ECD / 65/2015 points out, learning by competencies "implies comprehensive training in people." Therefore, these methodologies must be active, that is, the student must be the protagonist of their own learning. In this way, you will be able to achieve meaningful and permanent learning over time. For this, the use of technologies plays an important role, both by teachers and students. Likewise, related to active methodologies, is the PBL (Project Based Learning). Vergara Ramírez (2016: 36) defines PBL as an educational experience, opposed to the traditional transmission of knowledge, since what it produces is a personal and social change in the student. In this way, the contents become the tools for the students.

Once the methodology is defined, it is necessary to analyze what tools are used by teachers of Initial Education (*Enseñanzas Iniciales:* Primary Education for Adults), teachers of Secondary education and those of Basic Vocational Training (*Formación Profesional Básica* -FPB) in our CEPA.

Initial Education (*Enseñanzas Iniciales)*

Thus, in general, and after the analysis of the results obtained in the surveys carried out, it is concluded that all the teachers of *Enseñanzas Iniciales* use the technologies in the classroom, as shown in the following examples:

- Virtual Classroom offered by the Community of Madrid in order to offer students the content they must work on and as a means of communication.

- Educational websites where teachers extract photocopiable materials or play interactive games through the PDI.

Due to the low digital literacy of our older students, it is difficult to maintain fully digital classes. However, it is possible to carry them out with the youngest students, although, on occasions, the socioeconomic factor prevents them from having the necessary technological resources.

In some Level II groups, digital classes are already fully implemented. In this case, the teaching-learning process is carried out through the completion of projects by the students. They can find in the Virtual Classroom the contents that they have to investigate and, in addition, they must develop the project through the use of programs to create text productions and exhibitions through slides, which they upload to the Virtual Classroom or send by email the teacher.

On the other hand, with older students, we must pay attention to the specificity of the lifelong learning initiative, which implies taking into account a series of key aspects that must be at the base of the proposed didactic methodology (Bendicho Montes, 2004). Thus, this methodology should meet the following characteristics:

- Enabling

- Motivating

- Flexible

- Not competitive

- Active

Secondary Education

With regard to secondary education, first of all, it must be borne in mind that, in recent years, the profile of the students in adult centers has been changing, as younger ones, considered digital natives, are increasingly enrolling. . In this way, it is convenient to create partnerships with ICTs to achieve meaningful learning in line with simultaneous intelligence.

Thus, after studying in detail the surveys carried out by the secondary school teachers of our CEPA, it is concluded that the tools used in face-to-face classes are very varied and traditional teaching is combined with digital. In this way, in traditional teaching, the following resources are used:

- Classic blackboard as support for the oral explanation of the topics

- Photocopied materials, textbooks, notes and cards

- News, schemes and concept maps

The most used digital resources are presented below:

- Digital board
- Computer

- Digital book
- Projector
- Tablet
- Mobile apps
- Virtual classrooms Moodle and Google Classroom

In relation to the teaching tools used to motivate students, the following stand out:

- Use of videos related to the subject
- Group activities
- Other types of materials, from educational games to computer programs and mobile applications.

To promote student learning, these traditional teaching activities are carried out above all:

- Schemes and concept maps
- Oral presentations
- Team work and cooperative activities
- Interactive games

On the other hand, digital teaching activities are also carried out:

- Digital presentations
- Use of Virtual Classrooms
- Educational applications

Thus, the teacher's choice of the aforementioned resources is mainly due to their ability to facilitate the acquisition of the competencies, knowledge and skills that they intend to work on and that are selected, to a lesser extent, for the development of specific functions (resolution of problems, planning and organization).

The teaching methods that the secondary school teachers consider the most suitable for our students are, for most of them, group work and carrying out problem-solving activities. Thus, all teachers who recognized group work as positive conceive this methodology as a strong point for the development of learning and social relationships. Some of the teachers also consider individual work, the theoretical lesson, the Flipped Classroom model and the laboratory tasks positive.

On the other hand, there is unanimity in the use of digital tools in teaching. Thus, the most frequently used resources are considered the following:

- Presentations
- Videos
- Websites with self-correcting online activities
- Didactic applications
- Virtual classrooms
- Videoconferences
- Explanations through audios

Regarding the use of digital methodologies, teachers have observed that students have deficiencies in digital training and lack of technological resources, a fact that makes it difficult to implement this type of methodologies in teaching.

Basic Vocational Training (*FPB)*

Regarding the Vocational Training that is taught in our center, it corresponds to the Computer Science and Communications family, therefore, the integration of ICT has been very easy and intuitive, since practically all areas of the curriculum necessarily imply the use of tools and devices linked to technology.

The usual equipment available in classrooms for the daily work of teachers and students includes these resources:

- One PC per student
- Teacher's laptop connected to the following devices:
  - Projector
  - Digital board
  - Printer
  - Built-in webcam
- Simulation tools for electronics and networks in the specific workshops of some subjects
- Mobile phone that our students occasionally use in class to search for information and participate in multimedia activities.

After reading the surveys and several informal interviews with members of the coordination group, it is agreed that the main methods used in the Basic Vocational Training segment in our center are the following:

- Slide presentations and digital texts to reinforce the theoretical lesson
- Viewing videos and photos

- Joint production (teacher-student) of interactive materials with the contents of technical and non-technical subjects
- Structuring and organizing content in personal learning environments (PLE)
- Continuous use of the computer as support for the evaluation activities of the students
- Design and creation of the digital portfolio
- Participation in webinars and courses
- Use of synchronous communication tools (with and without video) and asynchronous (email and chat groups)

Unanimously, the members who teach in this section consider that teamwork is one of the most appropriate teaching methods for our students, followed by activities to solve problems and laboratory tasks. These three elements support one of the basic pillars of *FPB*, that is, its direct orientation towards the world of work, with practical knowledge prevailing over theoretical knowledge, therefore, the use of ICT allows our students to learn from a most effective way.

In addition, since the 2018/19 academic year, with the installation of a GARAGE LAB in the center [http://fablabssociales.org/content/garagelab-cepa-casa-de-la-cultura-getafe/], within the 2nd year courses, the following methodologies were integrated in this space:

- Design Thinking
- Project Based Learning (PBL)

These methodologies entail an adequate use of ICT tools related to digital manufacturing (Tinkercad, Arduino SDK, and Inkscape, among others). The sessions carried out in the classroom dedicated to the GARAGE LAB necessarily imply group work, work in pairs and the continuous exposure and communication of the decision-making that each group is making in its project, so that all the ICT tools linked to team communication, coordination and planning will be the preferred option.

Regarding the methodology carried out in the Adult Centers of our country, again, the information is presented by educational sections: Initial Education, secondary education and FPB.

Initial Education (*Enseñanzas Iniciales)*

These are the methodologies used in *Enseñanzas Iniciales:*:

- Problem solving as a central axis in the teaching-learning process. Within this, his performance focuses on the constructivist model, since we take into account its three basic premises: what the student knows, how he learns and how to teach him (Perales, 2000: 48). From these proposals, the problem-solving technique is considered to be incorporated into a learning model for environmental

education. This means that students are trained to apply the content learned to real life, since, as stated in Order ECD / 65/2015, "it is necessary for teachers to seek […] help so that students […] are capable to use what they have learned in different contexts inside and outside the classroom". However, this transfer is not innate, so work with environmental problems is revealed as an essential resource (Álvarez and Rivarossa, 2000: 187).

- The sustainable project linked to Agenda 21 of CEPA Carmen Conde Abellán. This is considered Sustainable CEPA, since they work on the sustainable development of the environment in a transversal way in all their groups. Its objectives include the use of technological means, reducing the use of the photocopier, promoting recycling and the use of a school garden. In addition, they have registered their stairs in the StepJockey global application (it counts the number of stairs that are climbed and their conversion into calories burned).

- The Sustainable Consciousness project *("Conciencia SOStenible"*) of CEPA "Sierra de Guadarrama" in the Community of Madrid. Its main objective is the knowledge and care of the environment through new technologies.

Secondary education

Regarding the use of digital resources in secondary education in other Adult Centers in the Community of Madrid, this year it has increased due to the special circumstances that we are experiencing due to the pandemic. Here are some sample centers:

- CEPA Hortaleza - Mar Amarillo: uses digital resources, such as Virtual Classroom (Moodle), email, Cloud and instant messaging with its students (https://www.educa2.madrid.org/web/centro.cepa.maramarillo.madrid / area-tic).

- CEPA Sierra Norte: they have an educational innovation project, CEPAinnova, with which they intend to improve the teaching-learning process in adult education through methodological change and the transformation of spaces towards the classroom of the future that allows them to explore, investigate, create, develop and present. In addition, with the use of ICT and through digital literacy, CEPAinnova intends to reduce inequalities among the adult population by going for pedagogical and technological innovation through the introduction in the classroom of learning analysis models, methodologies such as Flipped Classroom and Project-Based Learning (PBL), not only in an interdisciplinary way, but also within all educational stages. In this way, the aim is to break down the barriers between academic levels and integrate all students into the same project. In the end, its main objective is to improve students' academic results and reduce absenteeism (https://www.educa2.madrid.org/web/centro.cepa.torrelaguna/inicio/-/blogs/cepainnova).

At the state level, there are also other educational centers that develop their work through digital methodologies, as shown below:

- CFA Palau de Mar, Adult Training Center of the Generalitat de Catalunya, has been implementing since the 2013-2014 academic year the Flipped Classroom in undergraduate studies in secondary education (GES). Likewise, they use the virtual classroom of Moodle (Colell Sancho, 2016).

- In the southern regions of the Valencian Community, there is a commitment to the didactic and pedagogical update of the teachers of the Adult Training centers (FPA), where the trainers of the FPA field of the CEFIRE (Training, Innovation and Resource Centers Educativos del Profesorado) of Alicante, Elda, Elche and Orihuela program innovative training actions aimed at updating and stimulating education professionals, on various topics such as, for example, the dissemination of active methodologies for teaching practice (cooperative learning, ABP and AxS). In addition, thanks to the educational tools that facilitate the knowledge of ICT and its daily application in the classrooms of the FPA centers, the participating students cease to be a mere observer of the educational process and go on to occupy their central role as connoisseur and creator of said process, helped by the teaching staff (https://epale.ec.europa.eu/es/blog/metodologias-activas-en-formacion-de-personas-adultas.).

Basic Vocational Training *(Formación Profesional Básica FPB)*

Regarding the FPB, our inclusion in the GARAGE LAB program, an international project, has allowed us to know the level of ICT integration in the teaching practice of other FPB colleagues throughout the Spanish territory. Through our informal contact through training sessions, video calls, group meetings and our formal contact through the meetings called *"FPB en red"*, organized by the Orange Foundation (http://www.proyectosfundacionorange.es/fpbenred/), the institution that manages the GARAGE LAB project, it has been possible to compile the set of methodologies that are applied and one of the key exponents has been selected in each of them, as shown below:

ABP

- https://fernandotrujillo.es/category/abp-proyectos/

VISUAL THINKING

- https://gelapithecus.wixsite.com/dibustoria

FLIPPLED CLASSROOM

- https://formacion.educa.madrid.org/enrol/index.php?id=426

GAMIFICATION

- https://www.youtube.com/watch?v=XCz0JbuhbiE&feature=emb_title

DESIGN THINKING

- https://pablopenalver.com/?s=design+thinking+

APS

- https://www.educa2.madrid.org/web/centro.cepa.sanlorenzo/aprendizaje-servicio

At the state level, the First Congress on Adult Education (http://congresoepa.es/) has been held recently, fully organized by the Adult Education Association, which has been promoting the dissemination and presence of CEPAs among the society and administrations. Thus, after conducting a brief analysis of the experiences that have been raised in this congress, it is observed that the methodologies represented above have been present in the set of experiences raised in the congress. Some of them are intermingle or expand but they all have in common the use of ICT.

What skills and digital resources would we like to put into practice in the lessons of all levels?

Initial Education (*Enseñanzas Iniciales)*

To conclude, in our center, it would be good for teachers to delve deeper into the use of digital tools in order to be prepared for the continuous changes and challenges that society demands of us. On the other hand, we would like to invest time in the digital literacy of our students, providing them with the necessary material resources, in such a way that the teaching-learning process can be carried out in its entirety digitally. In addition, all this is related to the considerable reduction in the use of paper, thus contributing to the sustainable development of the environment.

Secondary education

In the secondary education of our center, we would like to put into practice some applications, resources and activities, as presented below:

- Technologies to support teaching, for example, interactive whiteboards or mobile devices, among others.

- Digital communication tools to respond promptly to students' questions and doubts, for example, when assigning homework.

- Digital technologies (blogs, newspapers, organizational tools) that allow students to plan their own learning.

- Digital activities (led by the teacher and the student) in order to structure the lesson and thus reinforce the learning objective.

- Configuration of learning activities in digital environments, having anticipated the needs of the students in terms of orientation and attention.

- Consider how educator-led digital interventions - either face-to-face or in a digital environment - can best support the learning objective.

- Collaborative learning activities in which digital devices, strategies or digital information resources are used.

- Collaborative learning activities in a digital environment, for example, using blogs, wikis or learning management systems.

Basic Vocational Training (*Formación Profesional Básica –FPB)*

If we focus on the analysis of the use of ICT, the tools that are considered transversal in all modules are those that allow communication and teamwork: email, file sharing and collaborative document creation. In addition, these tools link to the Virtual Classroom that we use (Moodle, provided by our Ministry of Education). From the Virtual Classroom, teachers share materials, links and files so that students can carry out and submit work. In this way, a PLE (Personal Learning Environment) is built for each student, teacher and subject, in which the students are the main responsible for managing it and deciding, for example, if they link their mobile phone to these platforms and, if they use it outside of class, to be able to use it at the time they consider.

We also add all kinds of tools that complement the teaching-learning process: creation and editing of videos, infographics, digital portfolios, question and answer quiz tools, simulation tools for hardware laboratories, operating systems, electronics or networks. They are tools that generally describe a greater learning curve (for example, if we compare them with an email manager), but that we need to teach in FPB (Basic Vocational Training). Tools have recently been added that allow video calls: MSTeams, Jitsi, Webex, Zoom, which allow synchronous communication without physical presence and that allow, for example, confined students or teachers to follow or teach online lessons.

In all this set of ICT tools that we have been including in our digital backpack or PLE since the FPB was implemented in 2015, it seems that there is a gap that in this center we have not yet filled, that is the

agenda of the contents and important student activities. It is true that we have several calendar tools, both in the Virtual Classroom and in external tools, but these are not easy to use, they are not fully integrated into the set of daily tools and, in these times of pandemic, there isn´t a. tool that allows us to get closer to students, greater agility when communicating and that is usable enough (UX, User Experience) so that both teachers and students can easily integrate into our day to day, without large requirements, both hardware and software.

On the other hand, there are online tools such as *Kahoot* that have led to greater use of mobile phones in class, since they are configured in a few minutes. In this way, it has become one of the most popular tools of all modules and subjects. Likewise, these types of tools linked to gamification increase the motivation of the students and they also allow to consolidate the contents taught both in class and at home, since the “challenge” mode of the tool was implemented. Undoubtedly, if we could have tools similar to this one that could promote other types of activities inside and outside the classroom, we would achieve a higher rate of "engagement" and connection of our students towards what we teach.

2. Digital skills and abilities required to integrate technology in face-to-face classes

Digital skills were listed for the first time as transversal key skills for life in the European Commission document "*EU, Council Recommendation on Key Competences for Lifelong Learning,* 2006 & 2018", in which they were no longer considered strictly technical knowledge and procedures. They are the skills that both teachers and students must acquire to function in the digital field and, thus, be able to successfully face the different situations we may find in school and everyday life.

It is a reality that the labor market increasingly demands a series of digital skills that allow the safe and efficient use of information and communication technologies (ICT).

In our school, it is deduced from the surveys that the most significant strategies adopted to promote digital skills are:

a) Incorporating digital tools as a communication channel for the educational community:

- email (cepa.getafe@educa.madrid.org)
- school website (https://site.educa.madrid.org/cepa.getafe)
- social media:
    - Instagram (https://www.instagram.com/cepagetafe)
    - Twitter (https://twitter.com/cepa_getafe?lang=es)
    - Facebook (https://www.facebook.com/Cepa-Getafe-472350689800326)
    - Blogspot (http://cepagetafe.blogspot.com)

b) Promoting the use of digital devices through three main channels:

- Provision of computer equipment in the classroom, along with digital whiteboards, projectors and free Wi-Fi connection.
- Promoting the BYOD (Bring your own device) methodology, facilitating the access of students and teachers to resources at any place, time and situation. In our case, it refers especially to mobile phones, used as a learning tool, especially in Basic Vocational Training.
- Computer resources loan program for those students who do not have them.

c) Implementing the sharing and dissemination of educational resources through official educational platforms, such as Educamadrid (https://www.educa2.madrid.org/educamadrid/), as well as other platforms, for example, *Google*. Through this method of content distribution, the accessibility and durability of the same is favoured, as well as healthiness and the reduction of the ecological footprint.

d) Implementing digital tools in the evaluation process, improving the analysis of individual and group results (Virtual Classrooms).

e) Creating new educational resources, based on preferably free office tools and disseminating these tools so that students also become content generators:

- *Kahoot* (https://kahoot.com/)
- *exeLearning* (https://exelearning.net/)
- Audio and video editing

f) Incorporating the acquisition of knowledge and skills through digital tools into the learning process. This includes from the specific use of evaluation tools [*Kahoot's*, QR code generators and readers, digital books, video generation and editing tools, educational blogs (http://fpbelburgo.blogspot.com), etc.] to the employment, in Basic Professional Training of Computer Science and Communications, of educational platforms of new programming languages such as:

- *Scratch* (https://scratch.mit.edu)
- AppInventor (https://appinventor.mit.edu)
- Artificial intelligence (https://learningml.org/editor)
- Artificial intelligence https://machinelearningforkids.co.uk)

g) Promoting additional educational tools: video tutorials of Youtube, MOOC's, NOOC's, etc.

The data deriving from these surveys to our teachers expose the following assessments and needs:

- There is a demand for training, both for teachers and students, in the use and management of New Technologies, either to plan classes and create motivating *online* materials or when carrying out the teaching and learning process in online and face-to-face classes. In addition, we consider that they are an essential means to be able to function in the world we live in and thus to access all kinds of knowledge.

- Regarding "soft" skills, critical thinking and effective communication have been selected as the most significant ones. On the one hand, we consider critical thinking as necessary when selecting information according to the searches that students carry out, in addition to the messages they emit or receive or the applications or websites they visit. On the other hand, effective communication is also essential for students to have alternative means to communicate their results by written means, using programs such as word processor, interpretation of information in *Excel* tables or slide show documents in *Power Point*. Work

is done gradually in accordance with the progress of the students in the use of ICT and their own language, since the students are very heterogeneous both academically, in language competence , and in their age (the range varies from 18 and 90 years). In addition, effective communication not only allows student communication with their peers and with teachers to be quick and effective, but also facilitates communication and coordination between teachers.

- A common difficulty encountered by teachers is the online correction of student's tasks and the return time of the such correction, as well as the lack of link between teachers and students, thus resulting in a very impersonal correction process .

- On the other hand, from our point of view, there is a relevant deficiency in the reduced use of digital identity (digital certificate, electronic ID, etc.), manifested by adult students, as a general rule,. This acquires special relevance in the relationship of individuals with administrations, especially in a historical moment in which face-to-face access can be a difficulty. In this sense, we consider relevant an implementation by the administrations of digital identity as a mechanism of access to any procedure or information related to the individual.

After carrying out a research at state level, it is easy to see that, in adult education, we frequently find the mistaken idea that making a basic use of digital devices is equivalent to having a genuine digital culture. Thus, it is common for students to have skills in the use of a specific tool and, however, do not control the knowledge that would allow them to handle other similar tools or make the leap to other ones that may be related. For example, they often present difficulties in: identifying the different formats that a file may have according to its category (text, spreadsheet, image, video, sound, etc.), format conversion procedures, understanding the processes for the transfer to / from the cloud to local devices (mobile, *tablet*, computer), the concept of attachments, compression / decompression, etc. This, particularly in adult education, is due to the high percentage of self-taught people. That is why, the fact of joining a regulated and systematic training procedure helps them to clarify, plan and expand their digital skills.

At the global level, in international publications, such as the 2012 United Nations "*Digital Technology Facing the Challenges of Inclusive Education in Latin America*", or those by UNESCO "Strategic Approaches on the Use of ICTs in Education in Latin America and the Caribbean" and "The State of Education in Latin America and the Caribbean", both dated in 2013, it is stated that the impact of ICTs on education presents difficulties to show its effects on learning. These difficulties derive from

the fact that the use of ICTs involves new learning for individual students which are different from those present in standard tests, including skills, such as complex problem solving, communication, autonomous learning, collaborative work, critical thinking and creativity, among other. Although this study describes the situation in Latin America, a correlation is observed with our students, since adult schools are, at least in Spain, second-chance schools where the people who attend, due to different reasons, have not been able to obtain their degree before and the wide curriculum and short time available do not allow them to work on the aforementioned skills that ICTs can develop. For this reason, in the field of digital competences (https://es.unesco.org/news/competencias-digitales-son-esenciales-empleo-y-inclusion-social), both in developing and developed countries, there are large inequalities based on fractures such as socioeconomic status, race, gender, and educational attainment. Without policies working on this area, current technological advances can accentuate the disparities between people who have digital skills and those who lack them.

As a means of promoting digital competence, ACTIC certification (Accreditation in ICT Skills) is implemented in the Autonomous Region of Catalonia and, in the case of adults, it is implemented through of the COMPETIC certificate (Basic competences in ICTs for the training of adults). We understand that the implementation of a similar certification in the rest of the Spanish territory and its dissemination at the labour level, both in public administrations and in private organizations, would be an incentive element of digital skills.

3. Procedures and tools for the evaluation (formative and summative) of distance learning in Spain

In the next section, we will begin by analysing the evaluation procedures, tools and criteria are the most used by the teaching staff in our school (with a meaningful emphasis on the use of ICT). Then, we will see how it is developed in Spain, which will let us know if we, as a school, follow the "trends" in evaluation which are used by teachers in our country. Afterwards, we will list our proposals to improve resources and the use of ICT with regarding the students' evaluation and, also , an interesting idea about how evaluation could be carried out by using ICT. To conclude, we will explain how evaluation is carried out in our FPB(Vocational Studies), a model exhibited in several teacher training courses and other events.

Procedures, tools and evaluation criteria used at CEPA Casa de la Cultura

The *online* assessment tools that have been used are considered similar to those carried out in a face-to-face modality: oral and written exams (as far as possible), essays, interviews, etc. Regarding the management and revision of online assessment, email and social networks have been the basic communication channels between students and teachers; likewise, two management and revision platforms of the learning process have been introduced and developed: the Virtual Classroom offered by the EducaMadrid digital platform, belonging to the Ministry of Education of the Region of Madrid, and the platform provided by the *Google* company: *Google Classroom*. Programs, such as *Zoom* or *Jitsi,* have also been used for video call making.

On the other hand, with regard to the difficulties found while carrying out the evaluation process, we can mention the lack of immediate feedback between students and teachers and, also, the lack of training when using different procedures and tools to evaluate both content and skills. Furthermore, despite the tools described in the previous paragraph, there are serious shortcomings while evaluating in a digital environment, since it has traditionally been carried out face-to-face.

In order to analyse the situation of the evaluation process, we will start from the definition of two key concepts. On the one hand, there are evaluation criteria, which are the specific reference for evaluating student learning, and, on the other, learning standards, which are concretions of the evaluation criteria (they must be observable, measurable and quantifiable).

After a series of surveys, we observe that the teaching staff in our CEPA follow a fairly uniform trend. One of the most used criteria states that the student "must know, explain and apply the contents of the curriculum." Thus, most of us turn this idea into different “measurable” tools (learning standards)

such as, for example, objective tests, both written (tests, assignments, exams, practices, workbook) and oral tests (presentations, spontaneous questions in class, interviews).

Another meaningful criterion applied in our CEPA is the assessment of "interest in the subject and personal effort". We observe this concretion in the production and resolution of daily tasks, their appropriate presentation, expression, calligraphy and spelling, in addition to active participation in classes and the presentation of the necessary material for it.

Working on information is very important in our school. The assessment of understanding and organising information is usually carried out by the elaboration of diagrams, summaries and mind maps; the development of research works; document analysis (graphics, photographs, texts); the correct use of the technicalities for each subject and the appropriate approach, development and resolution of problems.

Finally, it should be noted that the teachers, practically unanimously, emphasize the importance of attendance and punctuality to class. The characteristics of our students make it difficult to fulfil this criterion at times, but there is a strong will to achieve it, both on the part of teachers and students.

In contrast, we observe that the criterion regarding the use of ICT has fewer adepts than traditional methodologies in terms of evaluation. Although it is true that the current health situation has “pushed” us to a greater use of new technologies in education, we are still far from an implementation and dominance at the same level of previous methodologies. Even so, we start to perceive the first (very satisfactory) results of this "adaptation to ICT" in our school. Currently, the use of Moodle Classroom by the Region of Madrid, as well as its corporate email (EducaMadrid), is implemented at a general level. Also, some educational applications such as *Kahoot*, *Google Classroom* or *PowerPoint* are starting to be used. Moreover, we must add the use of some technological resources that were already fully implemented, such as the digital board, overhead projections by a computer and beamer or audiovisual documents.

It is important not to leave reality aside: a large amount of our students is far from being able to incorporate new technologies into their education process quickly and efficiently. The main reason is the technological gap, the lack of economic resources; although we must point out that our CEPA is implementing a project for the loan of computer terminals to “minimize” or, at least, reduce this problem. Another reason has to do with age diversity. The youngest students are familiar with new technologies, but for older students, ICTs sometimes pose an added difficulty to their learning.

The statewide evaluation

It is observed that, in Spain, although traditional approaches prevail, cooperative methods are gaining force (Johnson et al., 1999). This methodology implies an innovation in the classroom, not only at the level of learning, but also of evaluation. «In a structure of cooperative activity, students are divided into small, heterogeneous work teams to help and encourage each other when carrying out exercises and learning activities in general. Each student is expected not only to learn what the teacher teaches, but also to contribute to the learning of the teammates. Students achieve this double objective if, and only if, other students also achieve it (there is a positive interdependence of purposes). The effect or "movement" that this structure causes is "cooperativity" among students in the act of learning. Thus, a structure of cooperative activity leads students to count on each other, to collaborate, to help each other throughout the development of the activity » (Pujolàs i Maset, 2009).

This type of learning is especially enriching in adult education, since, most of the time, within the class there are different levels and rhythms of learning that can be improved by the creation of work groups. Of course, this method implies its corresponding innovations in evaluation; since it will not only be carried out individually (traditional evaluation methods and tools) but also in a group. In this way, individual learning and work will have an impact on the group, that is, its positive evaluation will be the result of collective work.

If we take as a basis article 28 of the Education Law (Organic Law 3/2020) in force in our country at the time of writing this document, we can read that *"Assessment of the learning process in compulsory secondary school students has to be continuous, formative and inclusive*".

On this basis and in pursuit of these objectives established by law, we can find in this cooperative methodology a new way not only to teach and learn, but also to evaluate. More and more school in our country are implementing this new way of work. Thus, a reference school for this type of learning in Spain and in our region, even though it is not an adult school, is Colegio Ártica (Madrid).

According to Johnson et al. (1999), «the teacher must decide what criteria will be used to evaluate the performance of the students and how the information needed to carry out the evaluation will be collected the information. You will also have to define the learning process through which students will comply with the established criteria. During class, the teacher assesses learning by observing and questioning students. Not all learning outcomes (e.g. level of reasoning, mastery of problem solving procedures, metacognitive thinking) can be assessed using homework or written tests. These important results are only assessed by observing students 'thinking aloud'. Cooperative learning groups are "windows open to students minds," and observing these groups in action allows the

teacher to accurately diagnose student work and understanding. Cooperative learning groups provide an excellent opportunity to make an immediate diagnosis of students learning».

The more we deepen into the functioning and results of this methodology, the more it can be said that students and teachers in general (particularly, for those in adult schools) can find in cooperative learning a new possibility of work and evaluation. We should probably change traditional criteria and tools (which are not very effective, in many cases) in favour of new ones that allow us effective, continuous and inclusive learning.

Proposals to improve resources and the use of ICT in the evaluation process

Moving to other issues, regarding the deficiencies detected in our school, we would like to highlight the need for training in the use of ICT among students and teachers in order to gradually improve and increase its use in the classroom. We are facing a changing reality where new technology is gaining more ground and education is not an exception. One of the biggest problems found in the field of evaluation through ICT is the unreliability of the current tools that assess knowledge acquisition. Teachers in our school would like to have a digital tool that allows us to evaluate in a more effective way. It would be interesting to be able to monitor the learning process and obtain information on the students' progress as well as provide assistance in case of need.

Using digital technology to grade and provide *feedback* on assignments electronically delivered would also be very helpful, as the concept of self-assessment is considered relevant today.

In the same way, we would like to have applications that allow us to attend to diversity, such as, for example, a program that could "modify" an activity based on the diversity of the classroom: dyslexia, ADHD, spelling problems..., since our school is made up of more heterogeneous students (if possible) than those of any traditional school. At the same time, we must achieve this heterogeneity in our teaching and evaluating method in order to make progress in an educational system that is committed to innovation in an increasingly technologically dominated world.

These needs could be solved using the tools already described in the works of Fernández and Cebreiro (2003), Lázaro and Gisbert (2007), Educación 3.0 (2017) and in Order 3219/2010. The first one, held at the University of Santiago de Compostela, is considered one of the most interesting. Thus, Fernández and Cebreiro (2003) highlight the little tradition of the use of ICT for evaluating the teaching processes despite the possibilities offered by these in favour of a more flexible teaching, emphasizing that they could be applied throughout the evaluation process (initial, summative and final). There are numerous advantages of this method:

- Design of individualized tests adapted to the students' needs.
- Design of highly varied and inclusive evaluation tests.
- Possibility of managing evaluation through different channels and at different times, thus facilitating the autonomy of the students to take the test.
- Applications that allow students immediate self-evaluation.

Among the evaluation tests that are carried out using ICT, the following can be noted:

- Tests that include different types of questions, such as those mentioned by Cabero and Gisbert (2002): multiple-choice questions, short-answer questions, crossword-type questions, matching questions, complementation questions, true-false questions, questions for image and sentence sequencing, ordering questions, etc.
- Conceptual maps. They allow to identify the relationship that is established between the different concepts of a topic.
- Word and template processors to formulate activities or problems in order to apply what they have learned in possible or real cases, guiding the student in their realization.
- Self-evaluation exercises through templates. These offer students the possibility to reflect and participate in their own learning process.

Therefore, the main objective is the creation of an electronic tool that facilitates the teaching activity on a day-to-day basis, such as, for example, an electronic portfolio to evaluate the teaching-learning process. In addition, as an evaluation tool, a rubric system is proposed to check the degree of completion of the tasks by the students. Thus, the portfolio will guide the students' learning process, making them aware of their evolution through the achievement of objectives that the teachers will have previously set. The teacher's work will be to organize and guide the students' learning by setting out objectives, evaluate and provide recommendations. As for the students, their learning will be developed by identifying the knowledge, expressing it and reflecting about it on the evidence included in the portfolio.

The process is divided into four phases:

- Start of stage: the teacher defines the objectives to be achieved by the students.
- Recording the tasks that the teacher proposes to the students and the marks they get.
- Evaluation: personalized recommendations are made for each student through the portfolio, associating recommendation with the objective not achieved. Thanks to the whole process, the teacher can reformulate the objectives adapting them to the needs of each student. In addition, each task will have a different value depending on the importance the teacher gives

it for its contribution to the acquisition of a specific competence and that will be weighted in relation to the final grade.

- End of stage.

This portfolio is a tool that is fully adaptable to any unforeseen circumstance and allows the tasks to be adapted to the different learning rhythms in order to be an element that enriches and does not segregate. Moreover, it is intended that the students reflect on their own learning process and are aware of their evolution. Thus, among the specific platforms for the design of this electronic portfolio, some resources by *Google* are used: *Google Drive* and *Google Sites*. However, there are other blogging platforms to consider, such as *WordPress* and *Blogger*.

Regarding the evaluation rubrics, these will contain the evaluation criteria of each task through a brief description, different levels of execution and a specific value depending on each level of execution. These values will provide a weighted grading mark. In addition to the mark, the student will identify the different levels of acquisition of their own learning. The design of the system will be adapted to users with elementary levels of computer skills and will intend to meet the needs of both teachers and students in a fun, effective and appropriate way.

Our evaluation method in FPB: a model of success

To finish this section, we consider it convenient to present the evaluation model that we have carried out for years in our FPB. We have exhibited this model and its tools at the *"FPB en red"* congress of the Orange Foundation (http://www.proyectosfundacionorange.es/fpbenred/), in the first State Congress on Adult Education (www.congresoepa. es), in Teacher Training courses (http://ctif.madridsur.educa.madrid.org/index.php?option=com_crif_cursos&id=1904&view=uncurso&lista=formulariobusquedabasica&orden=&cadenaBusqueda=fp+b%C3%A1sica&modalidades=3&estados=3 5 & academic course = 1 & Advanced Search result = true & Itemid = 36) and in various sessions of Good practices in Adult Centers, such as "*Mentor Actúa 2019*", in which we mentor CEPA José Luis Sampedro de Madrid during his first year with the FPB (https: / /www.educa2.madrid.org/web/centro.cepa.sampedro.madrid).

In our FPB we have designed an open and dynamic assessment, integrated into the daily work carried out in class and where the student takes responsibility for it (no scares or "last-minute miracles").

This is based on four points:

• Evaluation as a learning tool.

As Vergara Ramírez (2016) points out, "PBL needs evaluation to be actively integrated into the learning process. That should be a part of the narrative of the project " Thus, evaluation

is not the end point of the learning process, but is part of it in a continuous feedback that allows the student to improve. It is necessary evaluation to be present in their day-to-day life. Students should be aware that evaluation is part of the improvement process (as opposed to evaluation as the end point of the learning process).

• Evaluation and positive reinforcement:

All FPB's work is based on positive reinforcement. We use reward (versus punishment) as a method of achieving behavior modification. Evaluation, therefore, must have this award-winning nuance.

• Evaluation and immediacy:

Because our students belong to the immediacy generation, they are unable to wait to reap the benefits of their work. Part of our evaluation form has been modified so that they obtain immediate results, which motivate them to continue going ahead.

• Evidence from the evaluation:

We have observed that everything that remains on the computer or in the teacher's notebook does not exist for our students; that's the reason why we have tried to make them responsible for their own evaluation evidence, which forces them to be aware. Therefore, they will also have the ability to modify it during the process (as opposed to the grade reaching them at the end, when they can no longer make any changes).

We use a set of tools:

• The exam (classic):

It is a basic tool, although in our programming it is not the one that has the most weight in the evaluation. In addition, we try to carry out several tests before reaching the "evaluation exam".

• Rubrics:

They allow students to know in advance what is expected of them and how they should learn it: Therefore, it is a guide in the learning process. Rubric-based daily work reviews need to be carried out while the process is going on and not just at the end point. This feedback will allow the improvement of the result.

• ICT tools:

Its use, both in assessment and in the learning process, produces a great impact on students. They are always motivating, agile and playful. Thus, the list of those that we use in the classroom is large. They are chosen based on various reasons: the content, the group of students to whom it is intended, the teacher's tastes, the availability of the tool, the Data Protection Law ... Some of the tools we use are presented below:

Kahoot	**https://kahoot.com/schools-u/**
Aula Virtual de EducaMadrid	https://aulavirtual33.educa.madrid.org/cepa.getafe/
Flippyty	https://www.flippity.net/
Classroomscreen	https://classroomscreen.com/
Plickers	https://get.plickers.com/
Drive	https://drive.google.com
E-mail	https://mail.google.com

On the other hand, it is necessary to mention the situation we experienced last year, where it was necessary to take the exams online. The use of technologies to be able to do the classic exam made it clear that, in many situations, it was impossible. In this way, multiple tools began to be developed to make it viable. The following link takes us to the latest in what the Community of Madrid is working on (exclusively for the online exams):

https://www.lavanguardia.com/vida/20210204/6223461/herramienta-final-impedir-copiar-examenes-online.html

• Self-evaluation and co-evaluation:

- We encourage self-evaluation so that students are aware of the work they are doing. For example, in workshops they should always fill in an item where they reflect on how they have felt, how difficult the work is for them, what new learning they have obtained, and even evaluate the teacher and indicate how they found the activity.
- In a similar process, both in workshops and in projects, a co-evaluation is usually carried out. They are asked to be fair when evaluating the work of their colleagues, insisting that this evaluation is not done “out of friendship”, but rather has to be based on results.
- They can also be done with the “evaluation targets”, both individual and group. “To make the targets, a set of concentric rings is drawn. The more external ones will indicate a better assessment of the analyzed criterion; the central ones, a lower one. Then, as many vertices as criteria we want to analyze are defined ”(Vergara Ramírez, 2016).

• Portfolio:

By modules, evidence of learning is collected, both in digital and paper format. These always have associated an evaluation or a co-evaluation that allows them to reflect on the work they have done, so that they can introduce the necessary improvements. It is essential in the workshop work.

•Observation:

It is a classic of evaluation. On a day-to-day basis, the teacher observes the student's behavior in the classroom, their daily progress, and records them in the teacher's notebook (either in paper or digital format). This observation goes beyond the academic content. Notes are made on other values, such as attitude, teamwork, leadership skills ...

• The stamp sheet:

It is a mechanism that we developed in our school and that is linked to our way of understanding evaluation. We seek immediate positive reinforcement that makes the student aware of how their learning process progresses so that they work on responsibility and increase their self-esteem. Thus, for each module, students have a stamp sheet where we reflect the daily work they do, assessing not only the content, but (and especially given the profile of our students) also the skills. In this way, when the student performs the task well, they get a stamp. Therefore, it is an immediate evaluation. Those who do not receive a seal know that they must modify their behavior to achieve it the next time.

The method is giving good results, since the students (for the first time, for some of them) find that behavior that have never been valued before is evaluated as positive.

At the end of the quarter, these stamp sheets are converted into a percentage that adds to the final evaluation grade.

The magic checkbook:

The stamp sheets mentioned above are also used to motivate students, improve participation and even attendance. The "stamps" that affect all the modules of the cycle (punctuality, tutorials, outings, projects ...) are exchanged for points for tests, never evaluation exams.

It is about rewarding students who are doing a good job in the classroom, allowing them to add the check (up to a maximum of two points) to the mark of a test. Students gain confidence, for example, to face a subject that had always been unattainable for them (and that led them to abandonment). That way, they have a safety net and they move on because they think they can pass the module.

This tool does not allow a student who does not have the minimum content in a module to pass it, but it enables students who have a good behaviour in class, attend, participate, help ... know that they can pass, thanks to the work they develop in class.

• Other evaluation tools:

To those described above, we add other forms of evaluation: through graphics, exhibitions, drawings, posters ... we both, teachers and students value other aspects. For instance, when

leaving an activity, anonymously, they should put a green ball, if they found it interesting and they believe it has added value to their training, or red, if it is the opposite.

These tools are not exclusively aimed at knowing the knowledge of the student, but rather their attitude, their involvement in teamwork, their leadership skills and their evolution in studies. The emotional state of the student is significant: without a good emotional state, no learning occurs. All these elements allow us to carry out a more accurate analysis of what is happening in the classroom and help us make decisions to improve processes. We also evaluate the methodologies used. Precisely, thanks to these evaluations, we know that students value our methods positively, that their motivation and self-esteem increase ... And statistics tell us that even academic results improve.

4. THREE GOOD PRACTICES OF EDUCATIONAL PERFORMANCE SELECTED IN OUR SCHOOL AND AIMED AT ADULT STUDENTS

The policy of good practices in adult education is developed and analyzed from the European framework to the national level.

EUROPEAN FRAMEWORK

In Europe, the Commission establishes expert groups from Member States that assess policies and good practices in different countries, analyze research results, and draw conclusions and strategic recommendations for policy makers (EAEA, 2019).

Between 2013 and 2015, the Adult Learning Task Force developed a series of key policy guidelines and recommendations according to EAEA (2019):

- Increasing the level of adults basic skills (linguistic, mathematical and digital)
- Making the most of ICT and Open Educational Resources in adult learning.
- Enhancing the efficiency, effectiveness and coherence of adult learning policies.

Thus, adult education offers new opportunities for employment and different learning experiences. In this way, it contributes to the acquisition of life skills. All this favors social cohesion and equality among adults, provides and increases their productivity in employment and workplace and, therefore, the success of companies. Furthermore, among adults, migration and demographic change allow cross-cultural learning and provide a common benefit among all ages.

Along with these challenges, digitization appears as a weapon to overcome the digital gap and exclusion, since it provides skills for the development of an active citizenship, closely related to the Millenium Development Goals (growth, innovation, poverty reduction, climate change, migration, peace, etc.). Some specific examples of good digital practices in Europe are shown below:

- France aims to fight electronic exclusion by providing ICT access and training for the elderly and disabled. In this way, it contributes to their inclusion into new social dynamics.
- In Italy, the Provincial Center for Adult Education (CPIA) of Padua carries out its teaching activities for the elderly, the disabled people, those with no academic qualifications, refugees and immigrants in vulnerable situations and women in social difficulties, poverty and social exclusion.

NATIONAL FRAMEWORK

In Spain, the development of good practices stands outin different regions , as shown below:

- The Asturias region is considered a paradigm of sustained negative demographic growth. This circumstance generates major problems of social insertion and, therefore, risk of poverty and exclusion. For this reason, some courses considered as good practices have been carried out. The duration of these courses ranges from the usual 15 hours for senior courses at the University of Oviedo to several full academic courses in the center of Gijon or Padua. Likewise, its subject matter is very varied, although the general and specific culture courses and courses related to basic skills in reading, writing, calculation and use of ICT stand out (Fombona and Pascual, 2019).
- CEPA Abril in Badajoz, Extremadura. Its PROMETEO Project is based on socio-occupational integration for adults. In addition to obtaining the title of Graduate in ESO (compulsory secondary education), the aim of this project is to "find a real development of their skills, key competences and practical application of knowledge, thus increasing their actual level of qualification" (Europe Press , 2018).
- **CEPA Clara Campoamor in Alcalá de Henares, Madrid. They have carried out pedagogical experiences linked to humor as a motivating tool to create a positive environment, such as, for example, graphic humor exhibitions or live cartoon parties.**
- CEPA Pedro Martínez Gavito in San Lorenzo de El Escorial, Madrid. Its project "Breaking down barriers" includes activities carried out by students from different origins and cultures, such as making visual posters showing their most outstanding customs.

4.1 Description of the first good practice. Initial Education (*Enseñanzas Iniciales*)

Technological first aid for lockdowns and pandemics

Target group: Adult learners (18-to-60 year-olds), of various origins (Spain, Morocco, South America, Romania…); previous level to Secondary School. 15 students.

2020´s experience : Keeping learning with mobile phones

As most of the students only had a mobile phone and used the WhatsApp, it was the means the teacher chose to teach them (except with one student who didn't have one and we did it through Facebook).

The methodology was simple: They connected at class time to the group of WhatsApp that they had done, greeted and began to chat as if they were in the classroom.

The teacher explained the contents with constant questions and answers. In all the sessions, the teacher had to make quick videos that she recorded herself –with her mobile- explaining what needed more attention or when the students asked for clarification of something in particular that they did not understand. She did that using a small blackboard or doing some role-play. They also corrected the proposed activities.

As a rule, the students always had to write (they could not send audios, because the teacher's mobile phone had little capacity). Likewise, they would send the exercises solved through a photo through the WhatsApp and she would return them corrected.

A day or two before having the lesson on a certain content, she sent it through the WhatsApp group, so that they could read it beforehand, because they couldn't do collective simultaneous reading.

The exams consisted of a questionnaire that the teacher sent through the private WhatsApp with limited time to answer, in order to avoid cheating.

Face-to-face digital training, just in case… (September-December 2020)

During this first quarter, both teacher and students have been acquiring the necessary skills to use the virtual classroom. They were more and more confident. At the beginning, all of them were in the school but, after some training, when one of them could not attend the lesson in person, they could follow the course without dropping out.

The students have had to learn to use a text editor. They have started from scratch, from how to use the mouse, use the keyboard, create folders and customize them, use and functions of the main buttons of the editor, save documents, insert images, make tables and diagrams, enter the virtual classroom and how to use it, download the topics, upload the tasks, use and send emails, save the work in the Cloud and then be able to download it and continue working, etc. They had also worked on how to browse the internet, the usefulness of URLs, download images and copy texts.

The contents remain in the virtual classroom once they have been worked on, but they are not all posted before explaining / introducing them because some students try and go on their own and they can get bored or go the wrong way. Therefore, the virtual classroom is a living entity in continuous growth.

They devote two hours a week to digital training.

Second term: a step forward…

Every student has a laptop on their desk. When they are in class, they are connected to the virtual classroom and, at the same time, they can follow the explanations on the smart board. The teacher no longer allows physical deliveries; everything has to be sent/ uploaded through the virtual classroom. Students who cannot attend the face-to-face lessons are able to do that online (through Zoom), and they can see the board too and interact with their classmates.

Goals:

- Consolidate the use of the Cloud in the following way: They start the tasks in the classroom; if they have not finished them, they upload them to the Cloud, to be able to do them again, or download them at home and continue working, or continue in the classroom.
- Consolidate downloading images and documents from the internet.
- Learn how to download videos from Youtube
- Learn how to convert pdf to word.
- Learn how to edit videos to expose work.
- Carry out questionnaires to evaluate digitally, simultaneously with colleagues who are at home.
- Practice sending emails.

4.2 Description of the second good practice. Secondary Education.

INTRODUCTION

During the current school year (2020-2021), as in previous academic years, the project "Neuronal Fitness" has been developed as good practice in secondary education (Levels I and II). This is part of the educational policy of the Autonomous Region of Madrid and responds to the objectives and recommendations proposed by the European Union and by the EAEA (European Association for the Education of Adults).

In the academic year 2019-2020, due to the pandemic caused by COVID-19, we had to apply online teaching, since the classroom activities were suspended. In this way, the lack of strategies and digital skills of the vast majority of students was revealed, so we reconsidered introducing in this academic year, within the “Neuronal Fitness”, the basic knowledge of digital skills for *online* teaching.

These good practices are part of the project plan of the school management team, since they are intended to materialize work to improve the students' previous knowledge and, thus, guarantee their academic achievements and develop their digital skills. At the same time, it is intended to create the

necessary conditions for a good relationship between the entire educational community. The most important factors to provide good educational practices supported by ICT are shown below :

- "It encourages motivation towards its use".
- "It promotes personalized work".
- "It promotes communication with students."
- "Stimulates learning or the acquisition of knowledge."

  Teacher training and optimal technological conditions to initiate ICT innovation and implementation processes are important factors for developing good educational practices, a coincident aspect in studies such as those carried out by Valverde, Garrido and Fernández Sánchez (2010).

OBJECTIVES

- Prevent Absenteeism as well as provide students with digital basic knowledge and study techniques.
- Encourage group dynamics (reduced by the social distance imposed by COVID-19) , since they allow to create links, facilitate social integration and improve their self-esteem and empathy.
- Promote and encourage their personal and educational interests to achieve success in their studies.
- Value the multiculturalism and diversity of the world that surrounds them in order to develop as citizens respectful of others and the environment.

DEVELOPMENT

At the beginning of this course, the project “Neuronal Fitness” was reviewed and it was decided to spend four class days to carry out group dynamics, study techniques and basic mathematical operations. The first school day, which was devoted to the introduction of the group, was structured as follows:

- Initial meeting of the teaching team to organize the lists of students and the necessary materials to carry out the proposed activities.
- Presentation of the course, where the tutor teacher welcomes the students, explains the functioning of adult schools and COVID-19 hygiene regulations. In addition, the timetable for the school year and an initial questionnaire for students’ information gathering are handed in.

- Personal introduction dynamics (some of them related to emotional intelligence).
- 15 minute break.
- Group dynamics with activities coming from the Responsible Education program and emotional management of COVID-19 .
- Teachers' meeting to pshare the results of the activities and proposals for improvement.

During the next three days, the following study techniques were worked on:

- Skimming
- Scanning
- Summarizing

Some basic mathematical operations were also practiced:

- Operations with natural numbers
- Combined operations
- Powers and roots

In addition, as mentioned in the introduction, due to the transformation of face-to-face teaching into online teaching by COVID-19, one day was devoted to the development of basic digital skills. The specific objectives (SO) that are pursued with the inclusion of digital training in the project are summarized as follows:

SO1. Scanning and sending PDF files via mobile phone.

SO2. Training students in the use of the EducaMadrid Virtual Classroom : access and registration with a specific code for uploading materials and its later correction by the teacher.

SO3. Learn to edit videos and use *Power Point*.

SO4. Accessing to EducaMadrid email and replying to messages.

Moreover, a further novelty for this academic year has consisted in its relationship with another project of the school, "Responsible Education Program", focused on the development of the different variables that make up emotional intelligence. In this way, these practices are conceived as activities with a certain stability throughout the course and valid to be developed in all areas. Therefore, all teachers work on these dynamics in order to provide basic knowledge and integrate students as citizens in a globalized world. It also contributes to improve the motivation and interest of the students and their integration in the group-class, as a way of interrelating and feeling that they are part of a community with common interests. Thus, we try to break down walls of social exclusion using learning as an empowering weapon. As indicated by the EAEA (European Association for the

Education of Adults), the year 2017 was “the European Year for adult learning ” under the motto “the power and joy of learning” .

METHODOLOGY

The tutor teacher of each of the eight groups that make up face-to-face secondary education in our school has been responsible for developing the group dynamics and training their students in the practice of digital skills, since this teacher is in charge of providing them with the email accounts and access codes to the Virtual Classroom and guide them on this technological route.

On the other hand, in previous years, the way of working the project contents was carried out mainly in small groups. However, due to the current COVID-19 situation, this course has developed the introduction group dynamics in large group and, the study techniques, mathematics operations and digital skills, individually.

EVALUATION

The tutor teacher evaluates the results through an online survey completed by students in Levels I and II of Secondary Education. These results are discussed among all the teachers of secondary education and they propose, for the next academic year, modifications or the continuity of the activities carried out.

Overall, the "Neuronal Fitness" project, is positively evaluated by the students, as they were participatory and interested in the introduction group dynamics, in the study techniques activities and in the acquisition of digital competencies. The latter has proved to be useful throughout the course, since students have been provided with autonomy and security in their technological skills and has made it easier for them to monitor online lessons, especially during the quarantine periods caused by COVID-19.

4.3 Description of the third good practice. FPB.

INTRODUCTION

The project "TICs con corazón" was established in the 2017/18 school year to cover the growing need to use ICT by students and teachers of the CEIP Sagrado Corazón in Getafe safely and efficiently. Thus, this project was created based on the service-learning methodology and under the premise of joining up training, practice and the creation of a unique partnership with students from a nearby school.

Under this project, our students test their social and personal skills, assuming their role as technicians at the service of the school's students who enjoy their computer room thanks to their support.

Since its birth year, this project has been carried out, with different number of sessions each year, adapting to the reality of our BPT classes and that of the school students.

WHEN

During the 2nd term of each school year.

PARTICIPANTS

· 1st and 2nd year BPT students in groups of 7-8.

· Teachers and students of elementary and primary stages of CEIP Sagrado Corazón.

DEVELOPMENT OF THE ACTIVITY

PREVIOUS PHASE

Before starting the planning and organisation of the various work sessions with the students in the school, a previous meeting was held with the teachers of both centres to agree on the number of sessions and the schedule of those sessions. CEIP Sagrado Corazón teachers select elementary and primary education classes as well as the levels that will participate. The teachers of these groups inform us the subjects and topics that they would like to cover utilising the computer room.

Likewise, the teachers of both centres analyse and identify the potential barriers and issues that may exist in order to use the computer room effectively (computer slowness, students or teachers lack of ICT knowledge, fear of computer problems, etc.)

PROJECT DEVELOPMENT

At CEPA:

1. During the previous weeks in the lead up to the beginning of this activity, BPT students prepare, motivate, organize themselves and assume their key role in the project.

2. The teacher / project coordinator determine the Work Teams and distributes both the topics to be prepared and the educational level before each session at school.

3. The work groups consist of 7-8 students and different work roles are divided among them (team leader, secretary, seeker, etc.)

4. BPT students prepare the material for the sessions in the school's computer room:

a. Search for different online resources and activities suitable to the educational level (videos, games, quizzes, mind maps, etc.)

b. Creation of activities and resources with different tools (kahoot, quizzlet, mindmap, etc.)

5. Before going to school, our students prove and test the material and activities for the session. They also decide the timings of these activities.

6. The teacher / coordinator has a guiding role throughout this process.

At school:

1. Verification and preparation of computers by BPT students.

2. Reception of the students and teachers of the school and explanation of the work and tasks that will be carried out during that work session.

3. Carrying out the session giving support to both the students and the teachers.

At CEPA:

Every session ends with a final debate, reflection and self-evaluation of the students and the teacher. This data is then collected and shared via a folder in Google Drive: https://drive.google.com/drive/folders/1wfLoIdKHf0kE4QQa5Qz1sMJMO1jLUtlf?usp=sharing

Since some students did not go to the school, a support teacher helped them to prepare activities for the next session.

OBJECTIVES

· To help young people to find their vocation and assume the role of technician at the service of potential “clients”.

· To promote team work and coordination skills.

· To promote empathy and ethical values towards children.

· To encourage the use of formal vocabulary and develop skills to adapt to other situations outside their daily educational context.

· To encourage the use of ICT outside the CEPA environment.

· To improve students' self-esteem.

CONCLUSION

The teachers of the CEIP Sagrado Corazón have stated, during the previous school years, that, if it were not for our support, they would not have utilised the computer room. They also noted that each year the number of teachers interested in participating in this project increases. Without a doubt, the most satisfying report we have received is the teachers commenting on the happy faces of the school students when they are able to use the computer room to learn.

In addition, it is a very well received activity by our students, since many of them already have acquired the ability to work with children and many others who, although they do not have these skills yet, empower themselves and take a step forward to carry out the activity and improve as technicians and future professionals.

Undoubtedly, it is a landmark project in CEPA. It is also very rewarding and highly recommended due to the benefits it brings for all the participants. Such was the case that it is already part of the BPT hallmarks in CEPA Casa de la Cultura, hence its inclusion in the centre AGP.

ADVERTISING AND DIFFUSION

During the III I & EDU conference (May 2018) this project participated in the Service-Learning section led by the same organising teachers, Mabel Esteban and Laura Plaza:

https://www.educa2.madrid.org/web/revista-digital/iii-jornadas-i-edu/-/visor/tic-con-corazon-una-propuesta-aps-en-formacion-profesional-basica- fpb-of-adults

Social media:

SERVICE-LEARNING IN OTHER ADULT CENTERS

Service-learning is an educational proposal that tries to promote the exchange of knowledge while generating a service to the community. That is to say, a service is performed at the same time that new learning is generated.

Below there are other Adult Centres that also use this methodology:

- CEPA San Lorenzo del Escorial (Madrid).
https://www.educa2.madrid.org/web/centro.cepa.sanlorenzo/aprendizaje-servicio
- CEPA Plasencia (Cáceres).
https://cepaplasencia.educarex.es/index.php/programa-itaca/323-aps-aprendizaje-servicio
- CEPA Pitiüses (Ibiza).
https://twitter.com/fadultos/status/1053317388433788928

5. THE CURRICULUM IN THE SCHOOL TO BE INTEGRATED WITH THE PROJECT METHODOLOGY AND TOOLS

5.1. Description of the curriculum selected in *Enseñanzas Iniciales*

Curriculum title	”Use of simple resources provided by information technologies to communicate and collaborate. Basic use of word processing ”. This content belongs to the Scientific - Technological Field that covers areas such as Mathematics (Order 3219/2010).

Please, specify the referred adult sector	• school system

Target audience description (e.g. age, foreign adults; the initial competences held, etc.)	It is aimed at very heterogeneous groups in all aspects: age, time they have been out of school, different national origin, religion or beliefs, but, in general, they do have a common denominator: school activity is considered secondary. They are students with low self-esteem, unstructured knowledge and little appreciation of them. In addition, they have difficulty understanding and expressing themselves in Spanish, lack of basic instrumental techniques, total or partial ignorance of new technologies, and few resources to access computer media and networks.

Description of the competence to be achieved. (only 1 competence)	Acquire skills in the use of information technologies: Internet browsing, file downloads, creation of email accounts, basic handling of the latter and basic use of word processing.

Considering the competence selected, describe the following areas:	
COGNITIVE AREA (e.g. increasing curiosity; focusing on creative and exploratory experiences; reinforcing the relationship between doing and thinking, etc.)	It will be key to present the new learning in an attractive, motivating and unfinished way, forcing the students to ask questions that, as they start from themselves, will arouse and awaken their interest and curiosity. This will lead them to formulate work, inquiry and exploration strategies that will help to acquire new knowledge, to share it (Affective - Expressive Area) and try to change and interact more effectively with the environment (Social Area). All this will lead to the intellectual development of the students, turning them into more active and committed-to-environment people.
AFFECTIVE– EXPRESSIVE AREA (e.g. improving aesthetic sensitivity; reinforcing expressive experiences; promoting the self-expression; supporting the expression of feelings, emotions and sensations)	The students must acquire the vocabulary of the different topics, use it correctly and be able to express themselves both orally and in writing in formal communicative contexts (presentations or evaluation tests) or informal (with their peers in group work) . It will be valued that the students use, creatively, different communication supports, such as murals, computer presentations or in a visual way. In addition to expression, the understanding of oral and, above all, written language will be favored as a means of autonomously reaching all kinds of knowledge.
SOCIAL AREA (e.g. encouraging socialization and social relationships; focusing on relational and interactive "experiences"; encouraging interpersonal communication, discussion, collaboration, participation and team working)	The empowerment of the Expressive Area will favor the Social Area, since it will allow students to understand and understand the contributions of other members of the group, in addition to sharing, expressing and arguing at the same time their own opinions and points of view, in order to be able to articulate their ideas with those of colleagues, thus obtaining, as a consequence of these interactions, a rich and inclusive product.

Please, describe the prerequisites of the students. (e.g. prior knowledge, skills, abilities, etc.)	Those of their own, which they already have acquired, of the level to which they belong.

What are the teaching resources (both online and in face-to-face modality) used for this curriculum?	Face-to-face teaching resources (in the classroom): • Theoretical printed material • Practical printed material • Computer and mobile • Audiovisual material: presentations, videos, graphics, etc. Online teaching resources through the Virtual Classroom: • Virtual classroom • Practical exercises • Internet • Viewing images and videos

How is the acquired competence evaluated in this curriculum? (e.g. individual assessment; class assessment; presenting learning scenarios/simulations; questionnaires submissions; interviews, etc.)	• Questionnaires • Resolution of tasks individually (or collectively) • Extrapolation of what has been learned to situations other than those in which learning has taken place and that arise spontaneously in the classroom. • Progress compared to its initial level • Perseverance

5.2. Description of the curriculum selected in Secondary Education.

Curriculum title	"Anatomy and physiology of the digestive, respiratory, circulatory and excretory systems". This section belongs to the block “People and Health.” Health promotion of the curriculum of the subject of Technology taught in Level II of Compulsory Secondary Education in Adult Education (Order 1255/2017).

Please, specify the referred adult sector	• School system

Target audience description (e.g. age, foreign adults; the initial competences held, etc.)	The average age range of the students are between the ages of 17-60, although a more detailed breakdown of the age groups are as follows: • <18 → 9% • 18-30 → 60% • 30-40 → 20% • 40-50 →10% • >50 → 1% Regarding foreign students, the most significant nationalities are shown below: • Spanish → 40% • Latin American → 40% • Moroccan → 15% • Other → 5% Therefore, it can be observed that there are limited problems in regards to the language spoken, as Spanish is the most predominate mother tongue for most of the students. From time to time, difficulties have arisen, however, the necessary support has been provided to overcome those difficulties. Regarding the initial skills, for this section of the curriculum to be developed, students have already acquired certain prior knowledge that will facilitate understanding and learning of the new skills.

Description of the competence to be achieved. (only 1 competence)	To identify the components of the digestive, circulatory, respiratory and excretory systems, as well as to know their function(s).

Considering the competence selected, describe the following areas:	
AFFECTIVE–EXPRESSIVE AREA (e.g. improving aesthetic sensitivity; reinforcing expressive experiences; promoting the self-expression; supporting the expression of feelings, emotions and sensations)	• To build self-confidence. • To improve students' self-esteem. • To motivate students to learn.
SOCIAL AREA (e.g. encouraging socialization and social relationships; focusing on relational and interactive "experiences"; encouraging interpersonal communication, discussion, collaboration, participation and team working)	• To promote collaborative work. • Interaction between students. • Streamline the classes. • To increase the participation in the classroom by the students. • To develop social skills. • To eliminate possible integration barriers. • Strengthen relationships amongst the students also the teacher-student relationships.

Please, describe the prerequisites of the students. (e.g. prior knowledge, skills, abilities, etc.)	In relation to the curriculum, students do not need prior knowledge and skills as they will be developed through this curriculum.

What are the teaching resources (both online and in face-to-face modality) used for this	Face-to-face teaching resources (in the classroom): • Theoretical printed material.

curriculum?	• Worksheets (completion and resolution in the classroom). • Visual material: projection of images. • Audio-visual material: projection of explanatory videos and documentaries. Online teaching resources in the Virtual Classroom: • Theoretical activities. • Tests. • Displaying images and videos.

How is the acquired competence evaluated in this curriculum? (e.g. individual assessment; class assessment; presenting learning scenarios/simulations; questionnaires submissions; interviews, etc.)	The evaluation of this competence is on an individual basis. To carry out the evaluation, the following tools are used: • On-site theoretical exam • Online activities (Virtual Classroom)

5.3. Description of the curriculum selected in *FPB.*

Curriculum title	Use of mobile devices in the classroom

Please, specify the referred adult sector	Vocational training (Basic Professional Training)

Target audience description (e.g. age, foreign adults; the initial competences held, etc.)	Adults

Description of the competence to be achieved. (only 1 competence)	Use of students' mobile devices in the classroom

Considering the competence selected, describe the following areas:	
COGNITIVE AREA (e.g. increasing curiosity; focusing on creative and exploratory experiences; reinforcing the relationship between doing and thinking, etc.)	Development of self-control in the use of mobile devices.
AFFECTIVE– EXPRESSIVE AREA (e.g. improving aesthetic sensitivity; reinforcing expressive experiences; promoting the self-expression; supporting the expression of feelings, emotions and sensations)	Improving students' motivation.
SOCIAL AREA (e.g. encouraging socialization and social relationships; focusing on relational and interactive "experiences"; encouraging interpersonal communication, discussion, collaboration, participation and team working)	Interaction and safe use of social networks.

Please, describe the prerequisites of the students. (e.g. prior knowledge, skills, abilities, etc.)	• Minimum knowledge of the mobile devices. • Students must own the phone they bring. Moreover, a mobile data line contract will be required. • Enough storage space on the device.

What are the teaching resources (both online and in face-to-face modality) used for this curriculum?	• WIFI connection or data line. • Monitoring software and control devices in the classroom.

How is the acquired competence evaluated in this curriculum? (e.g. individual assessment; class assessment; presenting learning scenarios/simulations; questionnaires submissions; interviews, etc.)	• Direct observation in the classroom. • Evaluation of targets. • Sending online questionnaires. • Creation of a portfolio with all activities carried out with the mobile device.

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