Boosting Classes 2.0 for high-quality teaching in adult education

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IO3 Outputs and recommendations for classes 2.0 implementation

EU-Track (Italy)

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Contents

Introduction

According to European statistics (2018): only 20-25% of students in European schools are taught by teachers who are confident with technology use, while 43% of Europeans lack basic digital skills, and about 71 million students need to develop their skills for the digital society. This shows how lifelong learning remains one of the fields where Europe falls behind, even though the support of technology-use and digital competence in education is the key aspect of the Digital Education Action Plan.

Moreover, different European countries demonstrate a particular variety regarding the situation in developing the e-learning system in adult education. In fact, based on Eurydice's report (2015), the percentage of adults (25 - 64 years old) who participated in distance learning (formal or informal), with an EU average rate of 2.2%, was, for example, 1.5% (-0,7) in Bulgaria, 4.9% (+2,7) in Spain, 1,5% (-0,7) in Italy and 0.7% (-1,5) in Romania (Eurostat data).

In Spain, the relatively high participation rate seems to reflect the efforts made by the Ministry of Education, Culture, and Sports (MECD). They have several complete distance learning programs financed with public funds. Whereas the corresponding registered data is much less encouraging in Bulgaria, Italy and Romania, despite the fact that different large-scale programs and private initiatives promoting e-learning training for adult education are in action.

Nevertheless, neither teachers nor students are prepared and equipped enough to produce a teaching and learning process effectively engaging the adults, who are, in most cases, immigrants.

In this context, a European project, "BoostClass 2.0" was created, co-funded under the Erasmus Plus programme, aimed to design a common framework among the participating countries (Italy, Bulgaria, Romania and Spain) for the identification of a teaching and learning approach to effectively promote and implement the integration of new technologies in adult education.

Based on the first result, *O1 - Framework to integrate new technologies in adult education*, a Learning Environment was developed where educators and teachers in the adult sector could improve their digital skills and increase their knowledge about the most used teaching methodology to introduce the technology into the classroom. Afterwards, the instructors and teachers trained could test, with their students, both methodologies proposed: project-based learning and episodes of situated learning.

Therefore, this report describes all the activities realised, the outputs reached during the piloting phase, such as the training course in e-platform (for teachers) and project works development (by students). It analyses the results achieved and provides a comparison of the expected and achieved results, taking into account all the final piloting activities.
In addition, the report also provides the analysis of observations on the work in progress carried out by teachers, by sharing the experiences and good practices realised in the partner countries. Finally, some recommendations underlining the strengths and weaknesses that emerged during the piloting phase are described, in order to support any future implementation.

1. The piloting phase

Each partner country managed this task at a national level through the organisation of online and face-to-face events, the publication of special announcements through social networks or other dedicated platforms, and by sending institutional invitations to several schools in adult education. This phase started with the selection of the participants to be involved. Each participant compiled the application form (*Annex 1 - Application Form*) designed through Google Forms. The selection criteria were the following:

- Full-time employees for at least one year;
- Have learners with difficulties in language subjects;
- A level of interest or motivation to participate in the piloting phase.

These were verified through self-certification.
The project team decided to abandon the criteria related to knowledge of English (at least level A2-B1), because all the training courses, the questionnaires used to collect data and all templates and guidelines were translated into Italian, Bulgarian, Romanian and Spanish.
The total number of participants in the BoostClass 2.0 training was 73. They completed the online training and decided to begin carrying out the project work with their students (Tot. 246).
The students involved in the second part of the piloting were selected directly by the trained teachers. They mainly identified those who had difficulties in the learning process, low skill competencies or backgrounds with school failures, and were at risk of social and labour market exclusion.

1.1 Target group description

As mentioned above, the target groups involved in the piloting phase were teachers/educators/instructors in the adult sector, and their students.
The teachers/educators/instructors were comprised of 73 people (26 from Italy, 15 from Spain, 16 from Bulgaria and 16 from Romania), of which 56,16% came from the school system, 34,25% from other educational services, 8,22% from vocational training services and 1,37% from "other sectors". Most participants teach Electronics (17,81%),

Technology/ICT (16,44%), Mathematics and Language (15,07%), and Foreign language (13,70%), as shown in the following Figure.

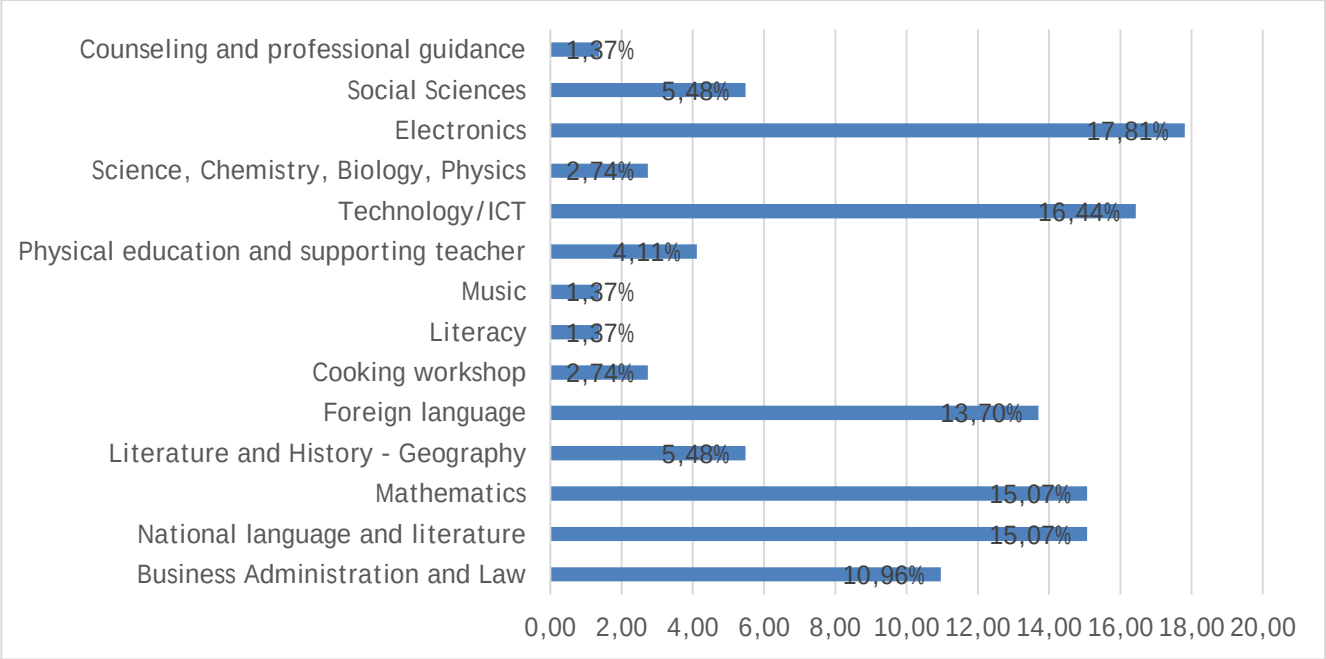


Figure 1. Subjects taught by respondents.

In addition, the sample was comprised of people with few years working in the adult sector: 41,10% between 0-5 years, 31,51% with more than 15 years' experience, and 27,4% placed in the middle position, between 6-15 years, as shown in the following Figure.

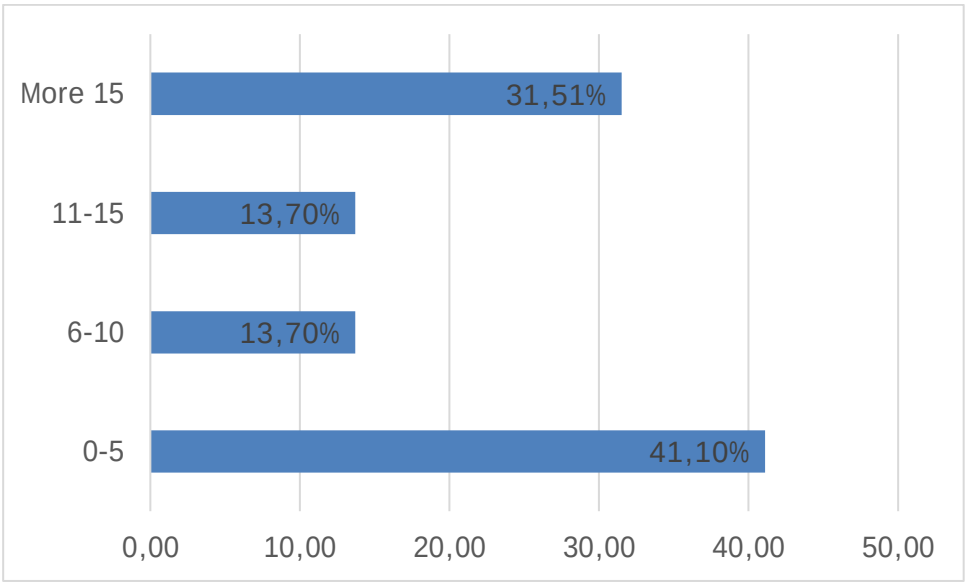


Figure 2. Number of years working in the adult sector.

Regarding the students involved, the results show that 59.35% were less than 25 years old, and 11,79% of respondents were placed in the 30-39-year-old field (Figure 3). In addition,

the sample was made up of 41,06% females and 57,32% males (with 1,63% - I prefer not to answer).

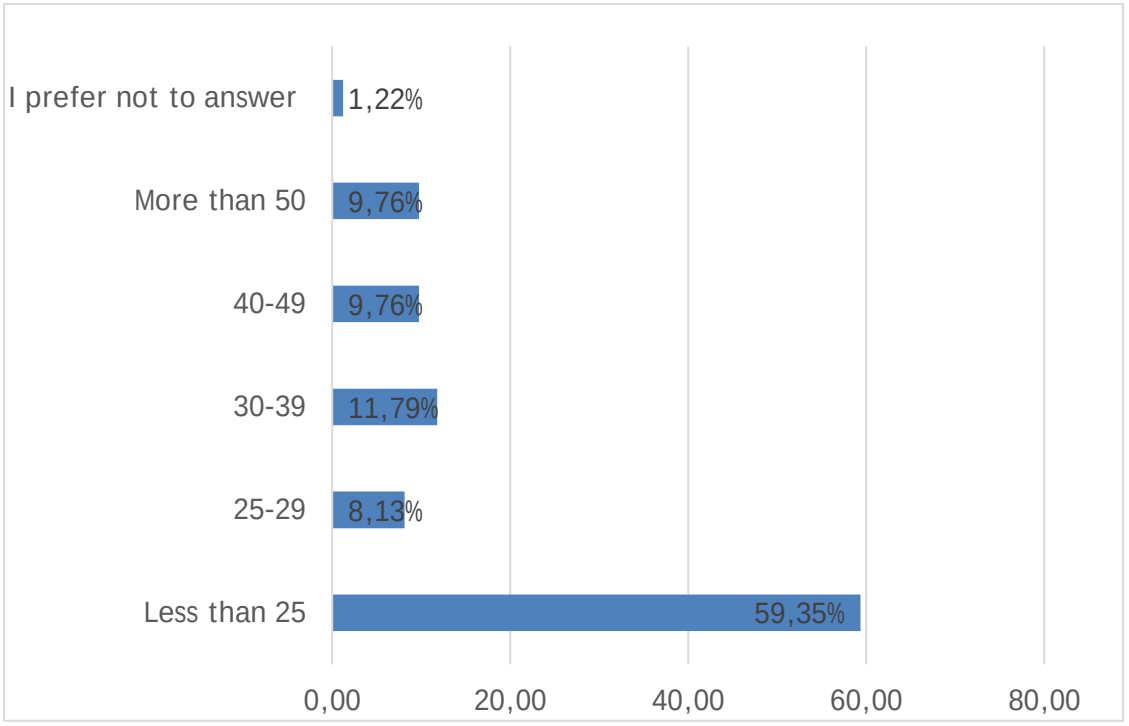
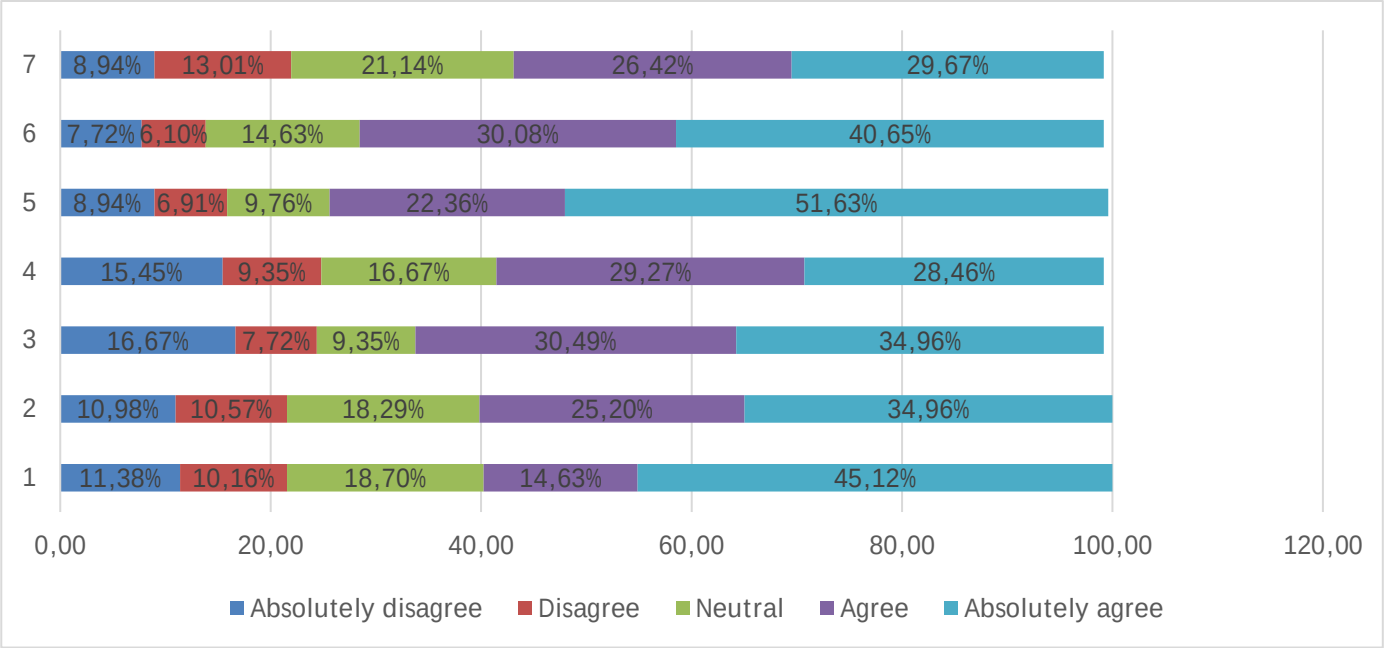


Figure 3. The age profile of the students involved in the project work performed in the partner countries.

Regarding the learning environment (Figure 4), where the learners attend their everyday lessons or training, 65,45% of the respondents stated that the school management supports the integration of digital technology in the classroom. In fact, 59,76% have at least one interactive whiteboard in the school, compared to 21,53% who don't have such digital tools.

Most schools have a stable and fast internet connection, 73,98%, compared to 15,85% that don't.

Not all students can access networked digital devices at home (15,85%). However, they can use digital technologies in the classroom (60,16%), including different devices, such as laptops, tablets, and smartphones (70,73%).



1 - There is an interactive whiteboard in every classroom.

2 - In the classroom, the students can use different digital devices (laptops, tablets, and smartphones).

3 - The school's internet connection is stable and fast.

4 - The students have access to networked digital devices at home.

5 - School management supports digital technology integration in the classroom.

6 - The subject studied promotes and supports using digital technologies in the classroom.

7 - Many of my fellow students use digital technologies in the classroom.

Figure 4. The features of the learning environment where the students attend the training/course/lessons.

*1.2 The **teachers' training***

The teachers' training was launched in December 2021, as shown in the next Figure, by organising webinar or face-to-face meetings to introduce the participants to the main features of the piloting phase: teachers' online training, e-learning platform as learning environment and the project work implementation with the students (*Annex 2 - Course Presentation - Launching time*).

Not all the participants started together. Therefore, the project team organised a number of meetings to launch the online training and to gather the teachers, instructors and educators in the adult sector as much as possible.

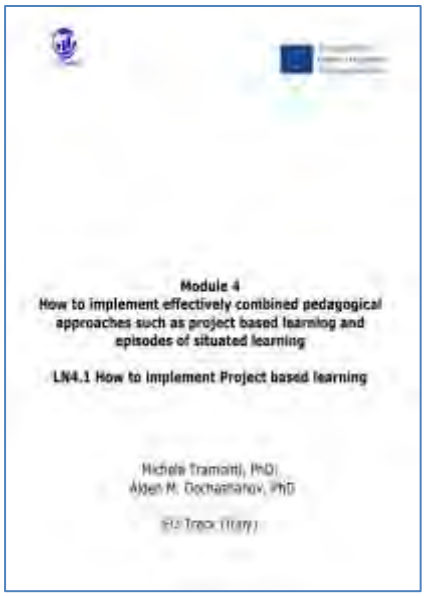
Figure 5. Three moments during the webinars with educators/teachers/instructors to launch the piloting phase, in particular the BoostClass 2.0 online course. The materials used for the presentation are available in different partner languages.

The teachers' online training was structured into four modules as follows:

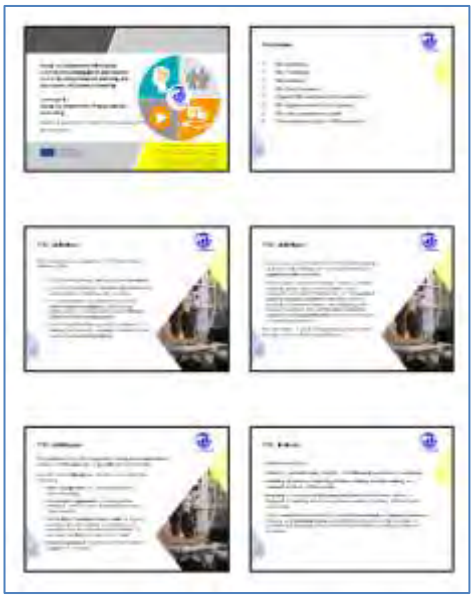
1. How to re-think the classes' borders by exploiting ICT potentialities.
2. How to develop and design an effective assessment and evaluation system for distance learning.
3. How to increase adult learners' motivation with technologies.
4. How to implement effectively combined pedagogical approaches such as project-based learning and episodes of situated learning.

Each module comprised a multimedia lesson, a power point presentation and one lecture note, as shown in the following Figure.

a.



b.



c.

Figure 6. a. Lecture Note; b. The Power Point presentation of the lesson; c. Multimedia lesson.

All learning materials are available in English, Bulgarian, Italian, Romanian and Spanish.

After the online training, the project team organised another meeting to launch and support the users in implementing the project work with their students (*Annex 3 - Project Work Presentation - Launching time*).

Finally, each participant, who accomplished the online training and the project work implementation, received an attendance certificate (*Annex 4 - BoostClass 2.0 Attendance Certificate*).

1.3 The teachers' learning environment

Access to the BoostClass 2.0 Learning Environment is through the project website (www.boostclass.eu), from the "Results" section - Promoting digital skills for classes 2.0 development. The link addresses the users to BoostClass 2.0 online training available in Bulgarian, Italian, Romanian and Spanish, as shown in the Figure below.

Figure 7. The access to the Learning Environment available in the partner languages

This e-learning platform hosts all the learning materials designed by the project team to provide teachers, educators/instructors in adult education with the skills needed to support them in integrating new technology and Apps in their classes using multidisciplinary and interdisciplinary approaches, based on episodes of situated learning and project-based learning.

Based on the results achieved in the first part of the project, and according to the framework designed, taking into account the *Digital Competence Framework for Educators* [1], also known by its acronym DIGCOMP [2], published in 2013 by the European Commission and then revised and updated, the four modules were divided into different topics according to the needs revealed by the target group:

- Module 1: How to re-**think the classes' borders by exploiting of ICT potentialities**
  - Topic 1.1. Collaborative Environments (e.g. Google apps + Drive)
  - Topic 1.2. Collaborative web site/blogs/notes
  - Topic 1.3. Interactive whiteboard
  - Topic 1.4. Virtual classroom (e.g. Google meet)

- Module 2. How to develop and design an effective assessment and evaluation system for distance learning
  - Topic 2.1. How to monitor students with Google Classrooms
  - Topic 2.2. Using quizzes/games
  - Topic 2.3. How to assess students by using a video quiz (e.g. Edpuzzle)
  - Topic 2.4. How to create a rubric to assess your students

Topic 2.5. How to create e-portfolio

- **Module 3. How to increase adult learners' motivation through the use of** technologies

  Topic 3.1. How to seek digital resources (e.g. Google search)

  Topic 3.2. How to use quizzes and games (e.g. Kahoot)

  Topic 3.3. How to use the YouTube app

- Module 4. How to implement effectively combined pedagogical approaches such as project based learning and episodes of situated learning.

  Topic 4.1. How to implement Project-based learning

  Topic 4.2. How to construct learning scenarios

  Topic 4.3. How to implement episodes of situated learning

  Topic 4.4. What the digital tools are to be used with the ESL approach

  Topic 4.5. How to seek training opportunities for continuous professional development

The BoostClass 2.0 Learning Environment, as shown in the Figure below, was considered by most participants in training (81,69%) as "easy to use", because it is user-friendly, the materials were accessible and could be downloaded for re-use. Some of them defined it as challenging, interesting, useful and fascinating. However, only 2,82% met some minimal difficulties.

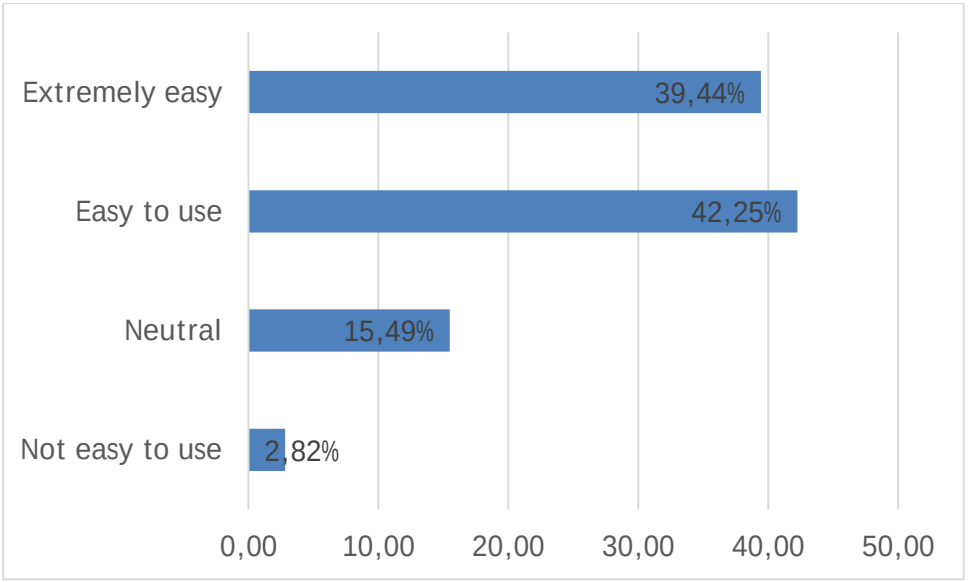


Figure 8. The ease of platform's use

1.4 The project work organisation with the students

The project work realisation started in January 2022 and continued up until June 2022, by involving teachers trained with BoostClass 2.0 online training and mainly their students. The teachers used some of the digital tools suggested in training by applying one of the methodologies promoted: project-based learning or episodes of situated learning.
There were several teachers' tasks to be carried out before starting the work with the students, as follows:

- Deciding on the number of projects to be produced;
- Determining whether the projects are mono/multidisciplinary or extracurricular;
- Choosing the topics to be used in the project/s;
- Dividing the class into groups;
- Choosing the teaching methodology: Project-based Learning or Episodes of Situated Learning.

In particular, the teachers were asked to prepare the students' activities following Table 1.

Table 1. The preparation of the students' activities

Phase	*Activity*	*Deliverables*	*Evaluation*
Ideation	• *Deciding the number of projects: one for the whole class, divided into sub-projects or several distinct projects;* • *Deciding if the project refers to one or more subjects;* • *Choosing the project topic;* • *Deciding if students work in groups or individually;* • *Defining the competence profile;* • *Explaining the project idea.*	• *Mind map* • *Competence profile*	*Defining evaluation rubric based on competence profile*
Planning	• *Breaking down the project into macro-activities and assigning them to students: "who does what and when".* • *Estimation of the execution time for all the tasks.*	*Schedule of the tasks and activities*	
Execution	• *Developing the project.*	*Artefact/Deliverable/Product/Service*	*Peer- and self-evaluation through the previously prepared rubric.*
Evaluation	• *Present project results and process the required documents*	*PowerPoint presentation, video, blog, event, etc.*	*Final peer evaluation, teacher feedback, final consideration and review of the evaluation rubric.*

2. Qualitative and quantitative data collection

During the piloting phase, the project team at the national level collected both qualitative and quantitative data from the target groups, teachers and students, to analyse the experiences realised.

Actually, the teachers participating in the online training compiled two questionnaires. The first, *Pre-Piloting Questionnaire for Teachers (Annex 5)* before starting the training on the BoostClass 2.0 platform and then the second, *Post-Piloting Questionnaire for Teachers (Annex 6).* The aim was to gather and compare relevant data to prepare final recommendations for those who intend to replicate the experience or transfer it to another sector.

In addition, after the project work implementation, the participants delivered a Teachers' Report (Annex 7) to describe the project work realised with the students and to collect the strengths and weaknesses of the methodologies introduced by the project.

Also, the students had to compile an online questionnaire, *Annex 8 - Student questionnaire after the project work implementation and realisation*. These tools give the project team relevant results about the project methodologies and instruments.

2.1 The initial state of the teachers involved

The first questionnaire, compiled by the teachers/instructors/educators participating in the BoostClass 2.0 e-course, aimed to gain an overview of their profiles mainly related to their knowledge and expertise in ICT and the use of ICT in the classroom.

Most respondents (94,52%) normally use the technology in the classes, compared with 5,48% who do not.

The respondents who use the technology prefer virtual classrooms (42,47%), for example, Google Meet, or, in any case, collaborative environments (27,40%), for example, Google Apps and Drive, followed by tools to produce a collaborative website or blogs or notes (13,70%) and also an interactive whiteboard (12,33%). Another type of digital resource used is YouTube to show videos. This has been evident, mainly, during COVID19 restrictions, when teachers and educators were obliged to arrange their lessons online at a distance. Only two respondents didn't provide an answer (Figure 9).

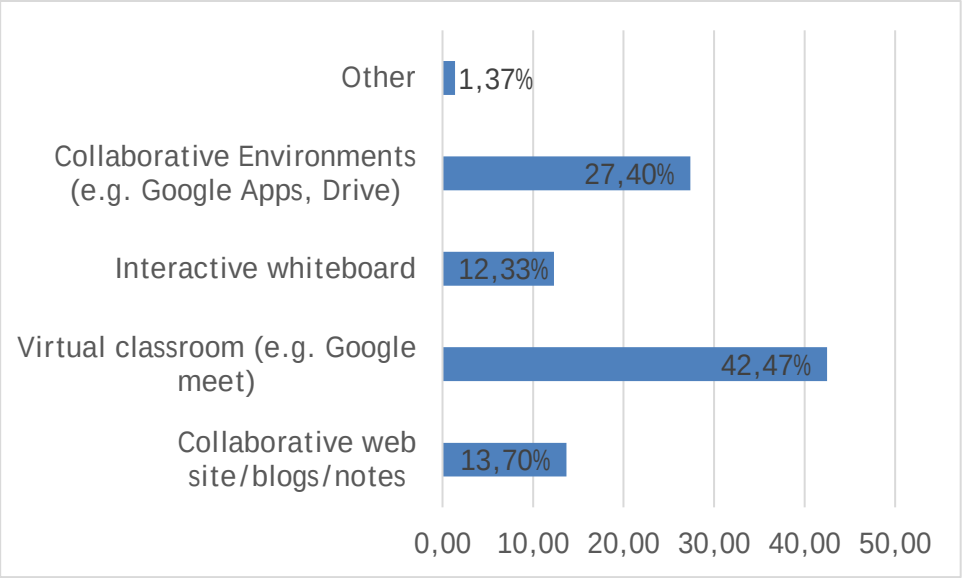


Figure 9. The type of technology usually used in the classroom. (*)
(*) The sample is n. 73, but there are two "No answer".

Regarding the modality of assessing and evaluating students' performance in distance learning, most respondents (65,75%) use quizzes, but rarely rubrics (8,22%) or games (6,85%), as shown in the Figure below. However, other ways to evaluate the students' knowledge and performance include video interviews, electronic register tests and oral and written examinations such as the resolution of exercises or essay preparation. In the case of the study of specific electronic circuits in specialised programs, simulations with virtual oscilloscopes are organised.

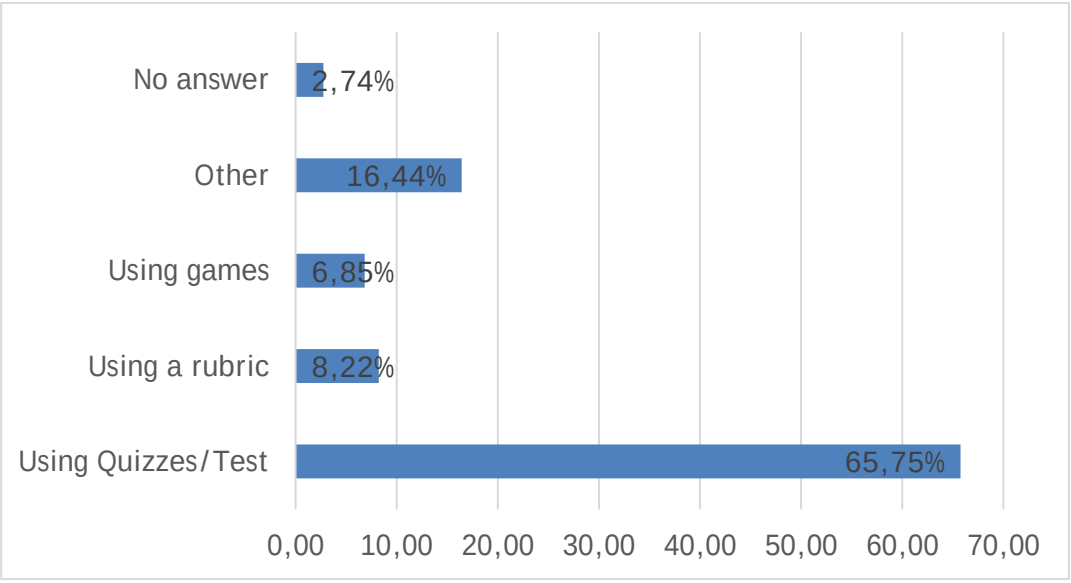


Figure 10.The modality of students' evaluation and assessment at a distance. (*)
(*) The sample is n. 73, but there are two "No answer".

After that, the survey analysed the participants' self-perception of their digital skills [2] by taking into account the digital profiles and the level of competence (Newcomers, Explorers, Integrators, Experts, Leaders and Pioneers) as described in the DigiComp Framework [1].

As shown in Figure 11, most participants had basic digital skills. 46,58% of the respondents perceive themselves as "Explorer" which corresponds to an A2 level, meaning they started using digital tools without following a comprehensive or consistent approach. 32,88% perceive themselves as "Integrators" corresponding to a B1 level: they use and experiment with digital tools for various purposes, trying to understand which digital strategies work best in which contexts.

Only three people assessed their level of digital competencies as "Newcomer" (A1), meaning they have minimal contact with digital tools and need guidance to expand their repertoire. One person assessed their level as "Leader" (C1), somebody who relies on a broad repertoire of flexible, comprehensive, and effective digital strategies, and one person as a "Pioneer" (C2), an expert in using contemporary digital and pedagogical practices.

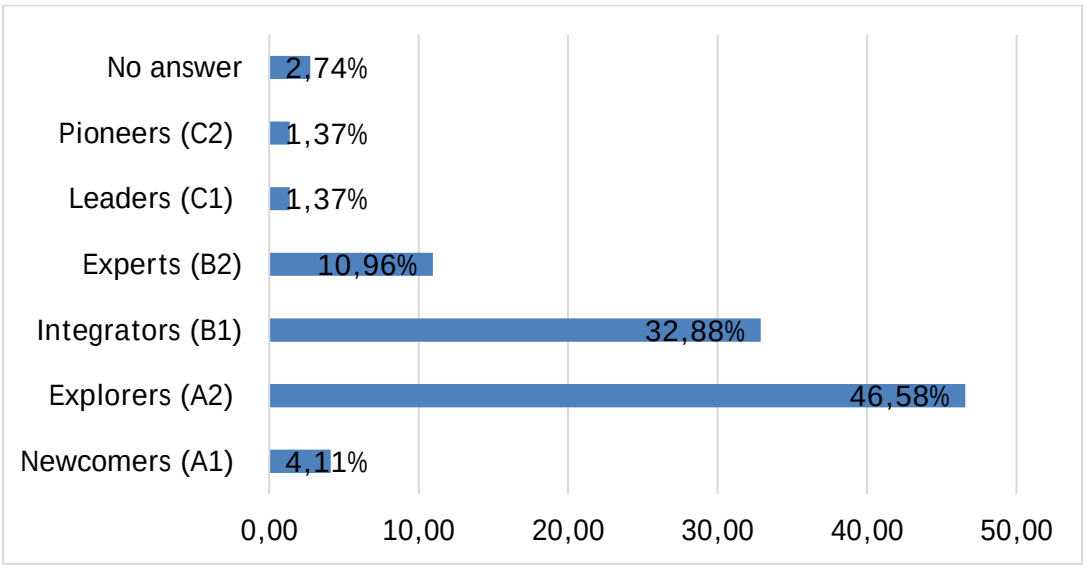


Figure 11. Self-evaluation of current digital competencies. (*)
(*) The sample is n. 73, but there are two "No answer".

Regarding the teaching methodology used, half of the respondents (52,05%) (Figure 12) use project-based learning because it supports students to be creative, develop their critical thinking, be active, autonomous, and independent, and be more collaborative with their friends. This makes students more flexible and responsible in their learning process.

In addition, this methodology can help the development of digital skills, individual research skills in a multidisciplinary way, and communication skills in writing, discussion and visualisation through the presentation of their final project to the class. Since project-based learning is focused on authentic learning scenarios, it can provide students with different kinds of experience in solving processes by working in teams. In the end, this increases their learning motivation.

However, most respondents (47,95%) prefer not to use it with their class due to the following reasons:

1. *There was no occasion to do so.*
2. *Because my students have no experience in working in groups because of the lack of adequate ad hoc spaces for carrying out projects (e.g. laboratories).*
3. *No need to do so.*
4. *Difficulties in working in a group because of cultural and age differences.*
5. *No constant attendance by students.*
6. *The discontinuity of attendance characterises the students in my classes and often this has caused gaps in their previous learning experiences. For this reason, many students find difficulties in developing a method of deepening methods of autonomous thinking that project-based learning surely requires.*
7. *I don't have a thorough knowledge of project-based learning.*
8. *I didn't think the students were ready for this kind of work.*
9. *Students' insufficient language skills.*
10. *Students are not familiar with this type of learning.*
11. *Covid.*
12. *Difficulties in the evaluation.*
13. *Lack of experience.*
14. *Because I do not have time.*
15. *Lack of time to prepare.*
16. *I have never considered it.*

The aim of those who use this approach is to encourage students' development, letting them experiment in the field to improve their creativity, communication, active involvement, and cultural exchange skills.

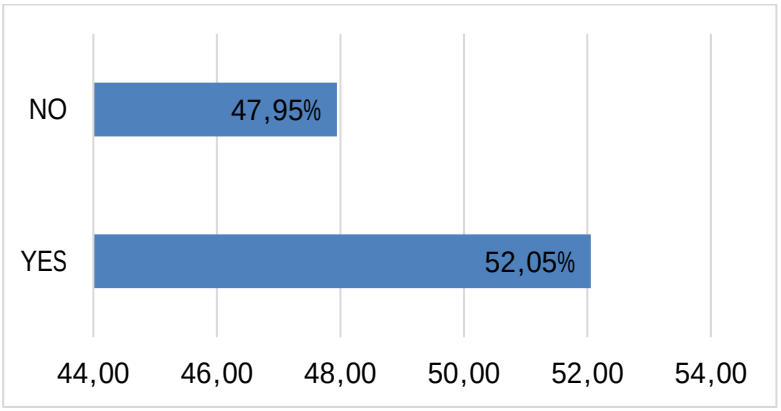


Figure 12. The use of the project-based learning approach in the classroom.

The situation is worse if the method used is episodes of situated learning. In fact, 63,01% (Figure 13) don't use this approach in the classroom due to insufficient knowledge and difficulties in its application, because most students cannot study autonomously due to their previous learning gaps, and the discontinuous attendance of regular classes. In addition, the respondents underlined as obstacle in the episodes of situated learning application the low number of hours available to work with the students or the lack of teachers' familiarity in its use.

On the other hand, 34,62% use this approach to avoid a lesson based only on its contents, stimulating students' curiosity, developing action, discussion, reflection and evaluation, and encouraging the students' active participation in their learning process and cultural exchange. Moreover, episodes of situated learning can support the development of communication, collaboration and research skills by learning how to use the information and select the correct sources. Through this approach, students develop further reading,

listening and comprehension skills and learn how to design and create a product by reflecting on all the activated processes.

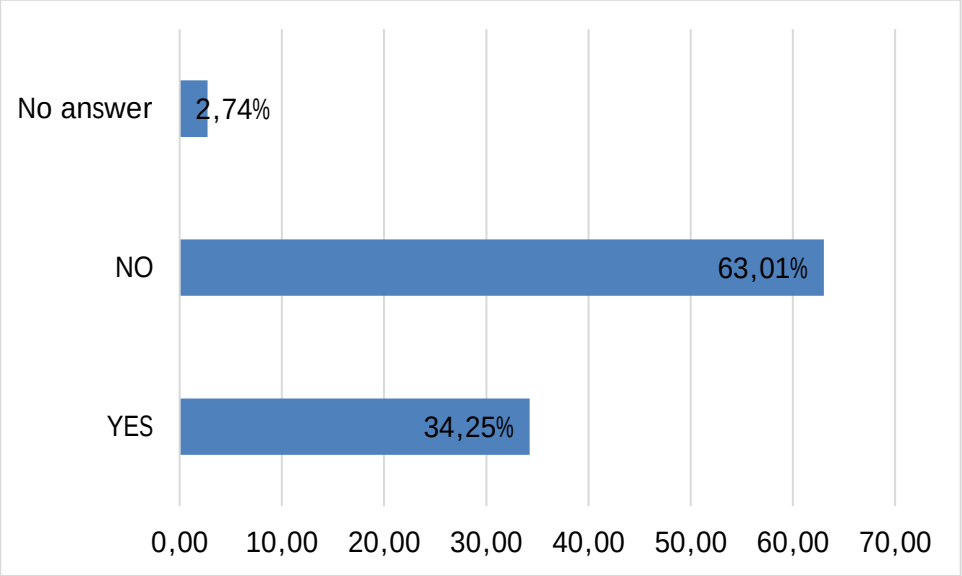


Figure 13. The use of episodes of situated learning approach in the classroom. (*)
(*) The sample is 73, but there are two "No answer".

The factors considered most important for participation in the BoostClass 2.0 training course were the following:

1. *Integration of technologies into teaching;*
2. *A better knowledge of oneself, others and diversity;*
3. *Improving digital competencies for innovative learning in adult education;*
4. *Increasing students' motivation;*
5. *Valorising the students' potential;*
6. *Learning about teaching methodologies (EAS and project-based learning);*
7. *Improving the systems and methods for the students' assessment and evaluation;*
8. *Increasing the students' engagement;*
9. *Stimulating the capacity for innovative learning, adaptable to conditions of rapid social change;*
10. *Motivating students in the learning process through quick feedback;*
11. *Familiarising with new educational concepts.*

2.2 The state of teachers after the online training

The total number of registered participants in the BoostClass 2.0 training course, who completed all the modules available was 71, compared to the initial 73 (- 2 people). At the end of the training, the participants filled in another online questionnaire (*Annex 6 - Post-Piloting Questionnaire for Teachers*) and were asked to self-evaluate the digital competencies acquired thanks to the training developed by the project team.

The results (Figure 14) show a significant improvement in all participants' digital competencies by raising their knowledge level.

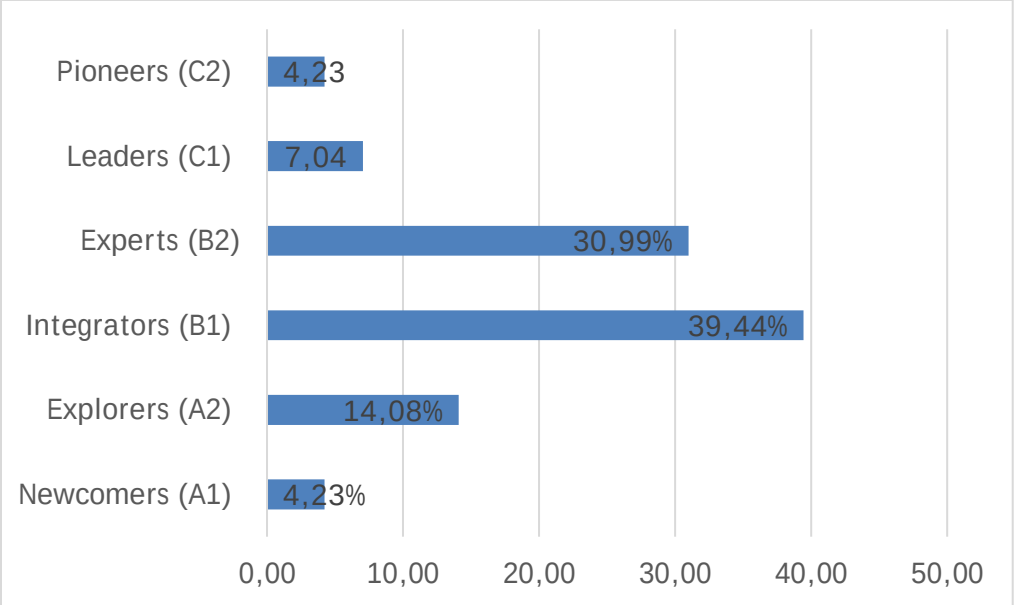


Figure 14. Self-evaluation of the digital competencies after the BoostClass 2.0 training.

As shown in Table 2, the level "Newcomers" (A1) increased by 0,12 points, while the level "Explorer" (A2) decreased by 32,5 points with respect to the initial level of the participants. The initial percentage of the level "Integrators" (B1) increased by 6,62 points and the level "Experts" (B2) by 20,03 points.

In addition, the best result is demonstrated by the improvement of the level "Leader" (C1) and " Pioneers" (C2), which respectively have an increase of +5,77 and +2,86.

Table 2. Comparison between the initial and final level of the participants' technology mastery

LEVEL	DESCRIPTION	INITIAL LEVEL (%)	FINAL LEVEL (%)	DIFFERENCE
Newcomers A1	The user has very little contact with digital tools and needs guidance to expand their repertoire.	4,11	4,23	+0,12
Explorer A2	The user has started using digital tools without, however, following a comprehensive or consistent approach.	46,58	14,08	-32,5
Integrators B1	The user uses and experiments with digital tools for a range of purposes, trying to understand which digital strategies work best in which contexts	32,82	39,44	+6,62
Experts B2	The user uses a range of digital tools confidently, creatively, and critically to enhance their professional activities.	10,96	30,99	+20,03
Leader C1	The uses rely on a broad repertoire of flexible, comprehensive, and effective digital strategies.	1,37	7,04	+5,77
Pioneers C2	The user is an expert in using contemporary digital and pedagogical practices.	1,37	4,23	+2,86

The second section of the questionnaire collected information about the utility of teaching activities gained through the knowledge acquired during the training (Figure 15).

Most of the participants (84,51%) found this knowledge very useful for their teaching practices, against 15,49% who remained in a neutral position.

The second module reached a satisfaction level of about 83,10%, while the first and fourth reached the percentage of 74,65% and the third 70,42%.

This data reveals a persisting difficulty in revising current teaching practices based on face-to-face modalities by integrating them with digital tools. Teachers and educators are still bound to traditional ways of assessing their students' performance, such as tests, interviews, and exercises. In fact, in relation to the first, second, and third module, the

fourth, concerning the assessment and evaluation system for distance learning, is a burning issue underlined by a quite high percentage of who selected a neutral position (26,76%).

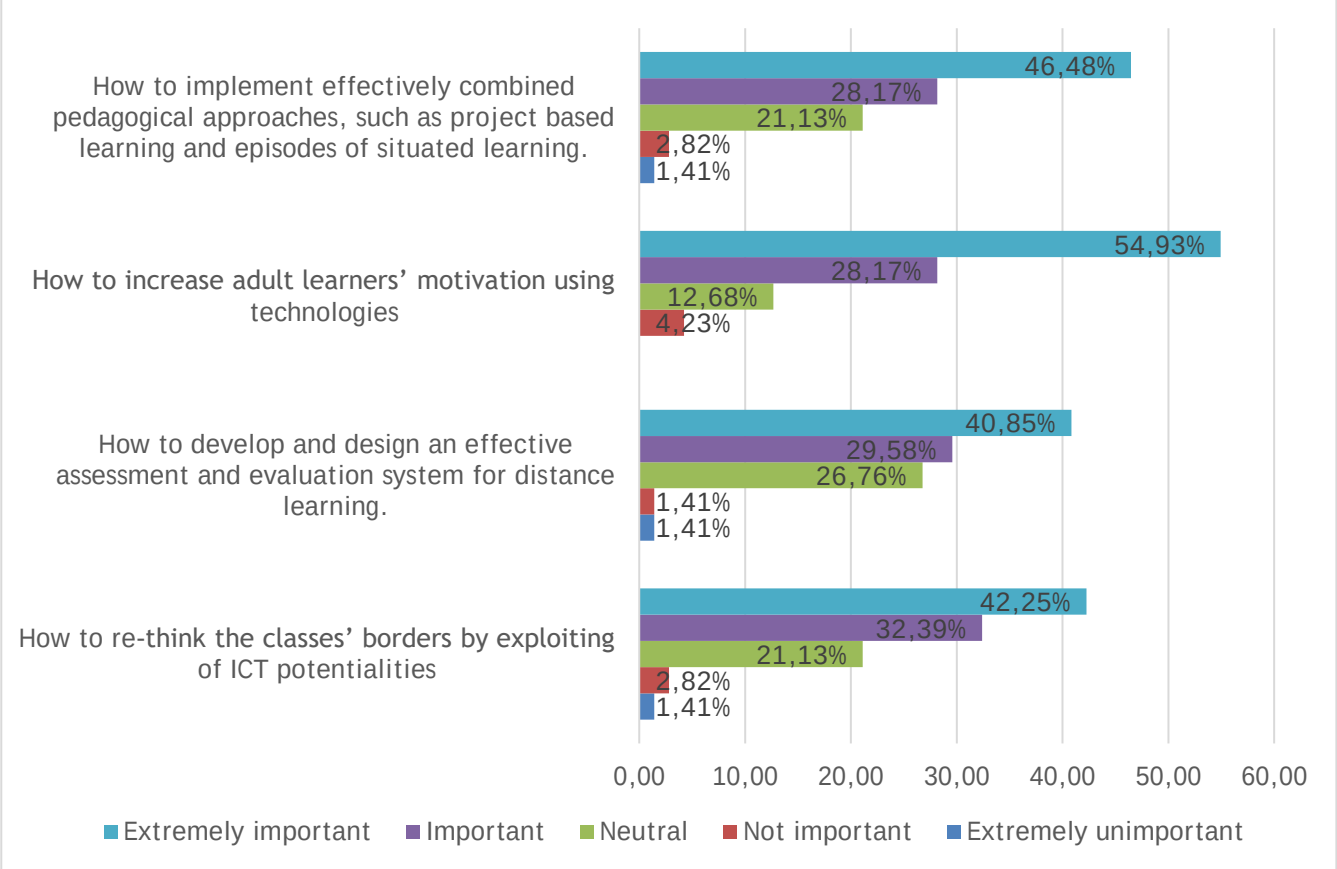


Figure 15. The knowledge fields and skills found useful and important for teaching activities by the BoostClass 2.0 participants.

The previous results have been confirmed by the ones described in the following Figure regarding the utility and functionality of the learning materials and teaching suggestions for everyday practice, provided by the BoostClass 2.0 training course. In fact, 84,51% evaluated the learning materials and teaching suggestions positively for their daily teaching practices for the following reasons:

1. *They are helpful for meaningful learning.*
2. *I didn't know about most of these tools.*
3. *Very useful as they offer an excellent alternative for innovative and digital lessons.*
4. *You can experiment in the daily practice these new methodologies and use the teaching materials and suggestions of the course Boostclass 2.0*
5. *I have learned new techniques and methods that I did not know.*

6. *They provide a comprehensive overview of the ICT potential.*
7. *They are comprehensive and well explained.*
8. *They are interesting examples, models, and new information.*
9. *They are easy assessment, quick teaching, efficient information techniques.*
10. *It has given me a lot of technological information to use in the classroom.*
11. *They are very useful because they streamline classes, make them more entertaining and improve student understanding.*
12. *They are very useful since they allow their immediate application in the class.*
13. *It is useful because it serves as a guide. Now I would have to take the step of implementing them.*
14. *They give me the freedom to work*
15. *I got acquainted with things that I did not even suspect existed and, at the same time, would help a lot in implementing interactive lessons.*

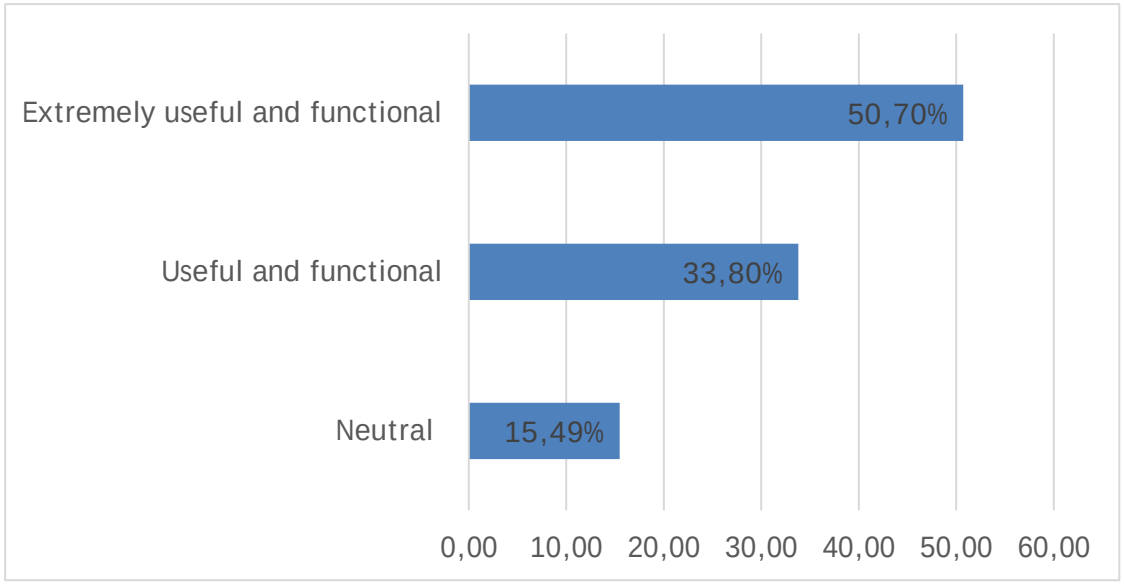


Figure 16. The knowledge fields and skills found useful for teaching activities by the BoostClass 2.0 participants.

However, a small percentage (15,49%) ranked the activities in a neutral position because the respondents would have wanted more detailed information due to their basic digital competencies or because they are challenging to implement, seeing as some schools still have connection problems.

In some cases, the respondents state that not all digital resources can be applied because students do not have the necessary knowledge of ICT or do not have a computer at home.

The teaching resources' usefulness for their daily practice depends on the type of students in the classroom.

Also, the BoostClass 2.0 Learning Environment was easy to navigate and use (81,69%):

1. *The modules were explained simply.*
2. *I found the videos which synthesised the topics very useful.*
3. *The slides and videos are very useful, synthetic and precise, practical, well-organised, comprehensive and functional.*
4. *The learning environment was designed and structured in a simple way.*
5. *The experience is useful for stimulating the use of new technologies, even for those with modest skills in this field.*
6. *It offers an interesting and innovative alternative to classical and frontal teaching.*
7. *The intuitive approach is encouraging and facilitates peer collaboration.*
8. *The access to the platform and the navigation between the lessons were easy.*
9. *Very well-presented lessons.*
10. *The learning environment was simple and intuitive.*
11. *Everything is well structured, although, at first glance, it is unattractive because you see a lot of text.*
12. *The resources are available at any time and could be downloaded for re-use.*

However, 2,82% (Figure) do not consider the platform easy to navigate due to a few difficulties met.

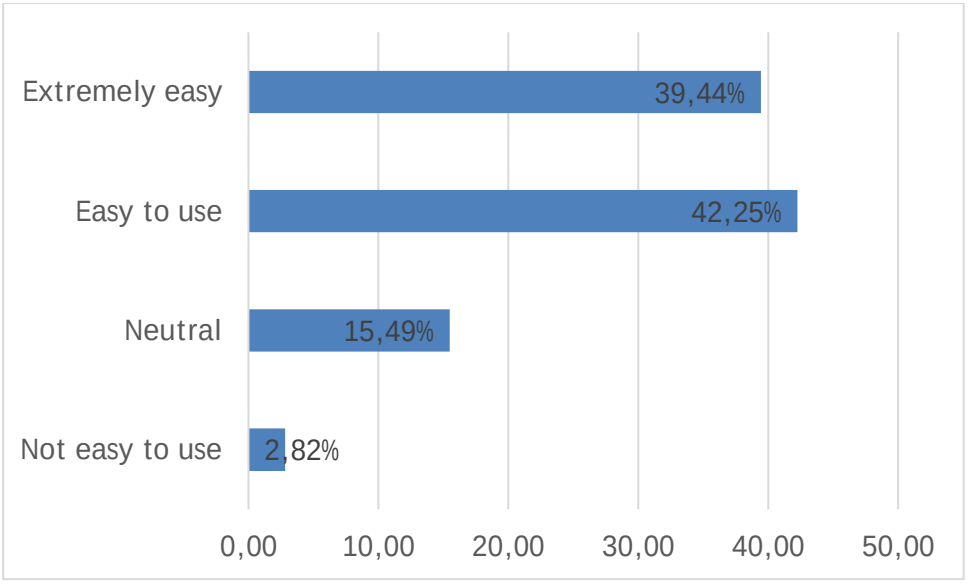


Figure 17. The easy navigation of the BoostClass 2.0 learning environment

As suggested by the participants, the teaching contents could be improved by replacing repetitions of single concepts with explanatory videos or additional multimedia materials, such as the use of an interactive whiteboard and a separate virtual room.

Regarding monitoring and evaluation systems with digital technologies (Figure 18), 12,68% don't monitor their students' progress with a digital tool, compared to 52,11% who state that they often and systematically use different digital devices, mainly quizzes (67,61%), games (11,27%) and rubrics (9,86%), to monitor and evaluate their students.

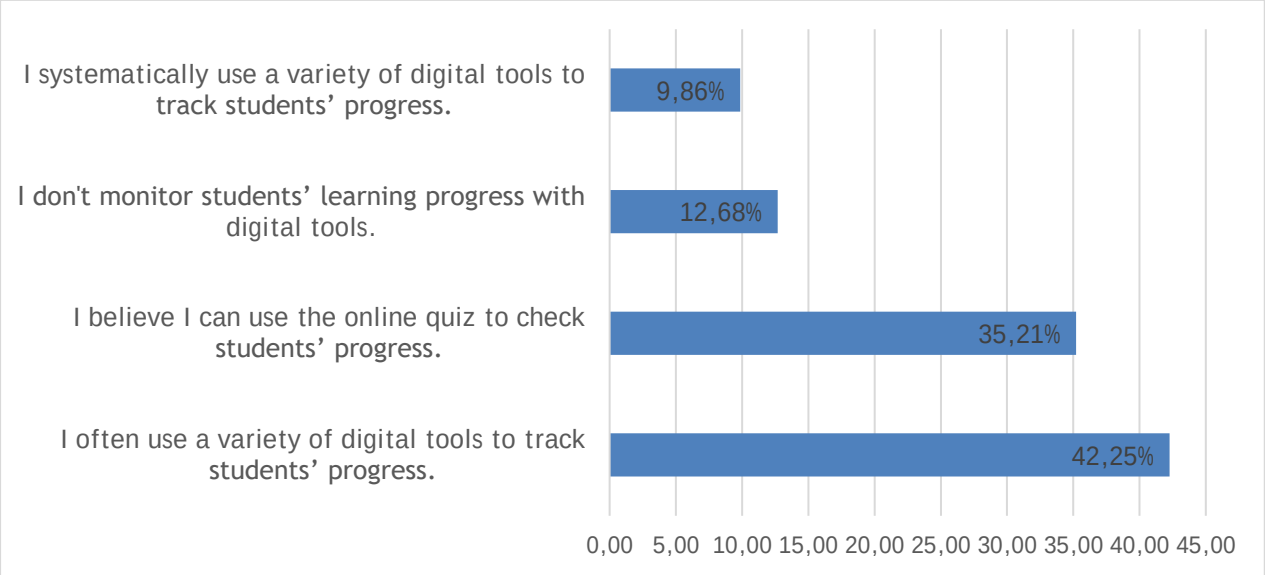


Figure 18. The use of digital assessment tools to monitor and evaluate students' progress.(*)
(*) The sample is 71, but there is one "No answer".

However, the participants prefer to assess and evaluate in face-to-face modality without the digital tools.

For the future use of digital tools regarding active student involvement in the classroom, 97,18% of participants (Figure 19) will integrate the everyday teaching practices and the technology, such as quizzes, games, and digital tools, to investigate and discuss, using videos and animations. Only 2,82% of the respondents state that involving students will not be possible because of the institute/organisation environment.

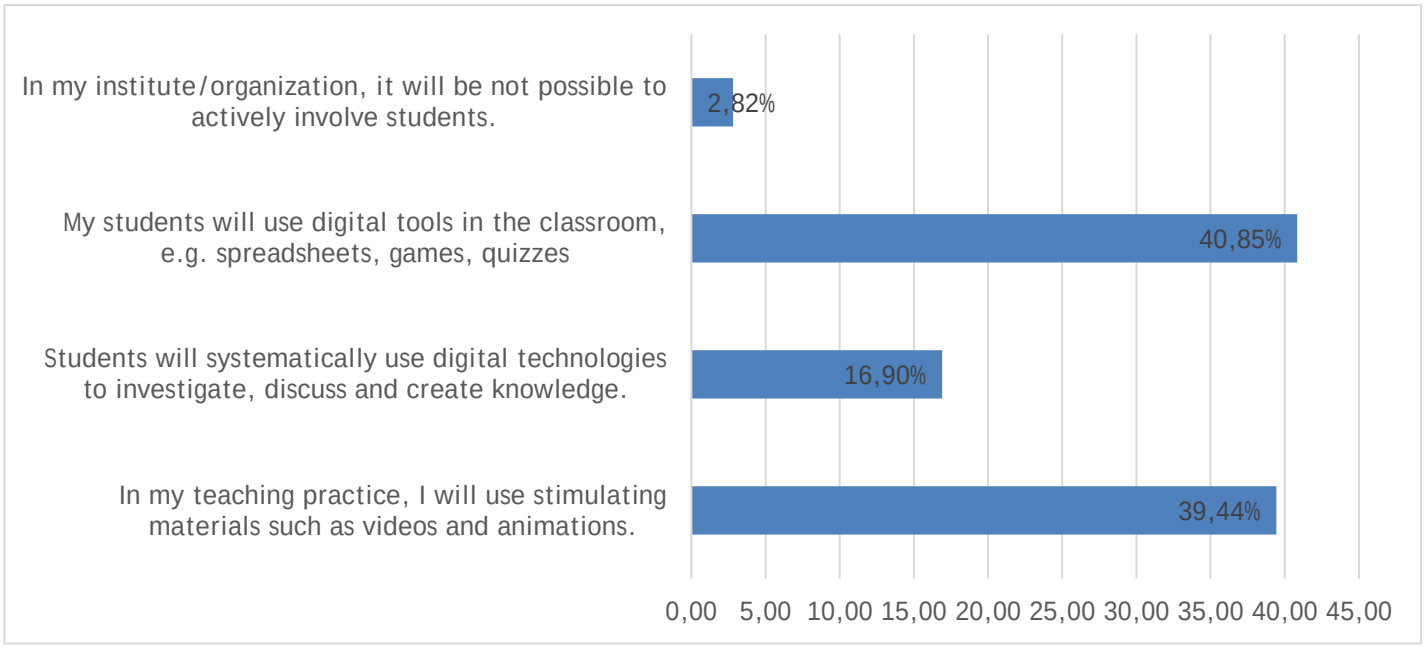


Figure 19. The future use of digital tools allowing students to participate actively in the classroom.

Regarding assessing the students' learning, only 12,68% (Figure 20) don't foresee using digital tools due to the students' low ICT skills or the institute/organisation setting. However, 87,32% of the respondents will integrate them systematically into their students' learning process.

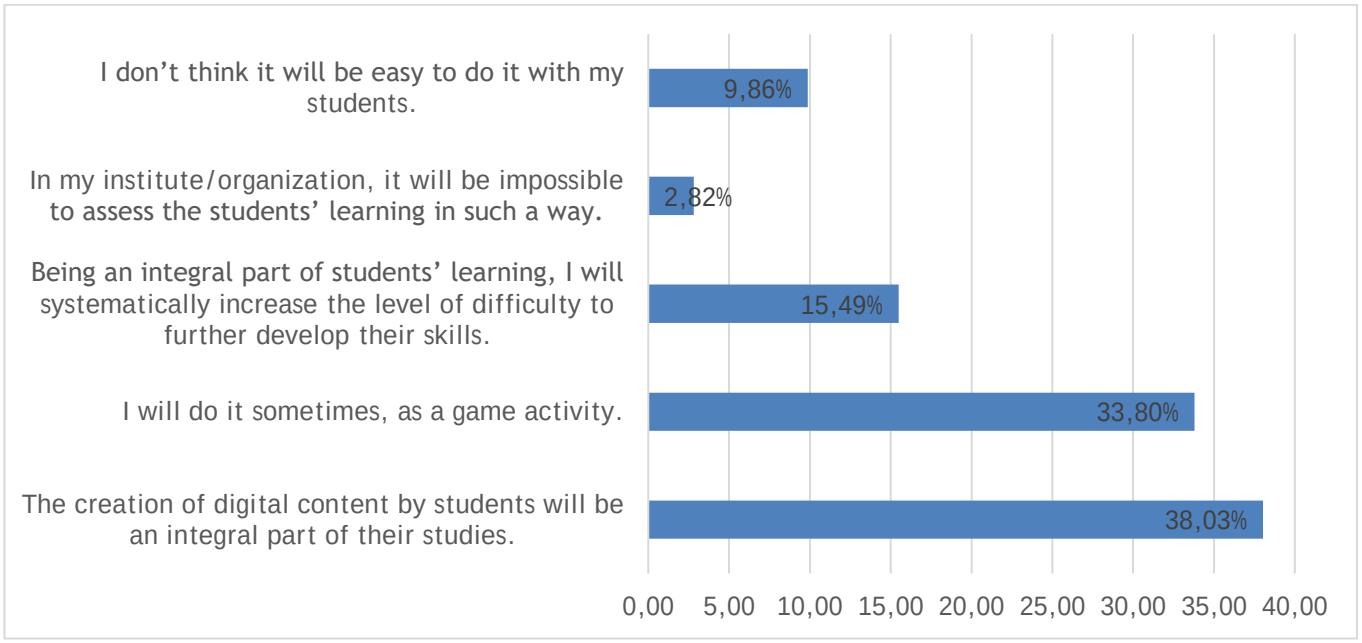


Figure 20. The future use of digital tools to assess the students' learning.

The participants evaluated their general knowledge and competencies on both of the methodologies proposed, project-based learning and episodes of situated learning (Figure

21). As shown, most of the respondents became more familiar with them. However, some of them need more time to practice both methods to be sure to use them correctly with their students.

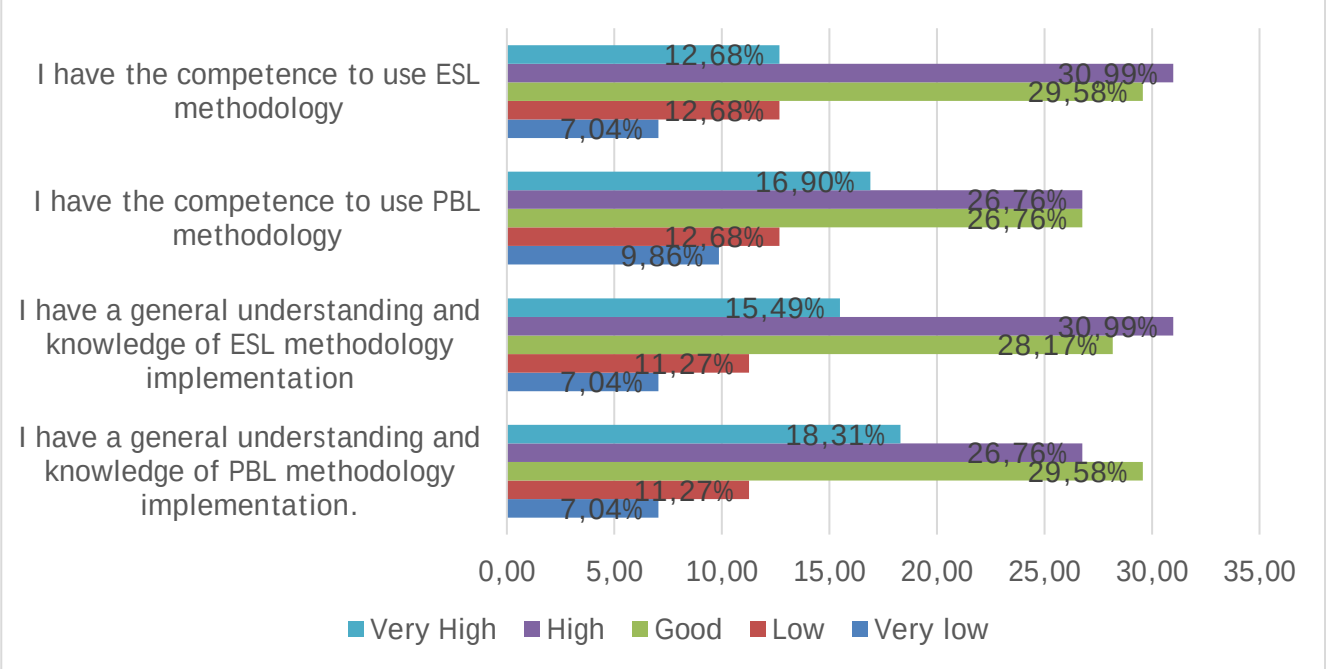


Figure 21. The level of the general knowledge, skills and competencies regarding the learning methodologies proposed.

54,93% (Figure 22) think project-based learning (PBL) is feasible in their classroom, and 38,03% see some possibilities in applying this methodology to their students. However, 7,04% don't foresee using the PBL in their classes due to high absenteeism and students turnover that would not give way to completing the work begun.

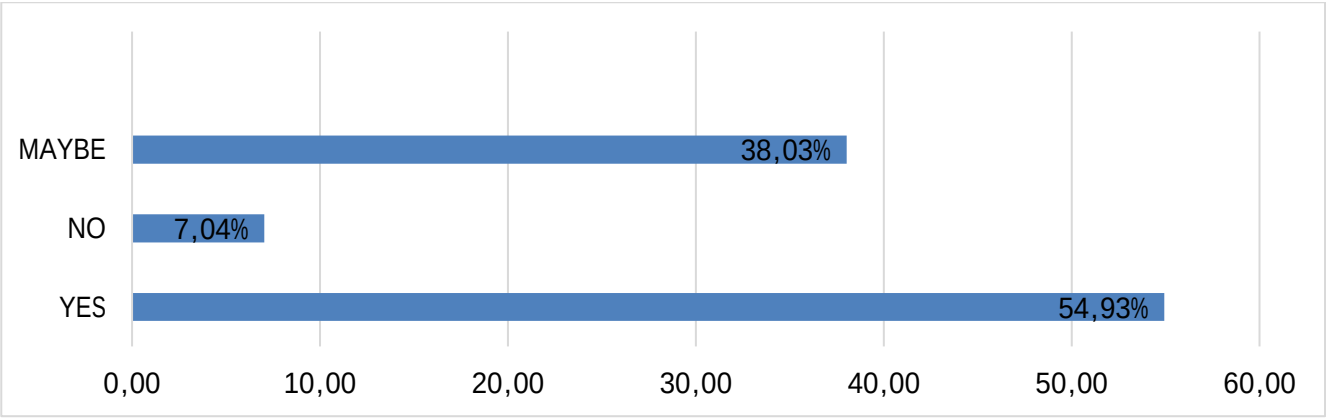


Figure 22. The feasibility of PBL methodology in the classroom.

On the contrary, the "episodes of situated learning" approach is considered more feasible to be adopted and applied in the classroom with adult students (59,15%), and 36,62% foresee some possibilities to use it.

2.3 Students' point of view

After implementing the piloting phase and realising the project work with the students involved, the project team collected feedback and comments by compiling an online questionnaire (*Annex 8 - Student questionnaire after the project work implementation).*

2.3.1 Students' project work implementation

The project works were managed in groups (64,23%), and the members considered the following as strengths points for teamwork:

1. *The capability to generate ideas.*
2. *Working in a team stimulates competitiveness.*
3. *Teamwork helps you find the best solutions.*
4. *I learned teamwork skills, time management, and sharing work tasks.*
5. *The distribution of tasks, a well-defined role in the team, the possibility to work from home, were the strong points of this experience.*
6. *I appreciated that each team member received a task they could solve and/or work on from home. This fact made us responsible. I also liked that I presented the result of our work to my classmates.*
7. *The collaboration between the team members was very good. We liked the topic of the project. The teachers supported the cooperation among the other teachers and us.*
8. *Team members always help you analyse a problem from multiple perspectives.*
9. *Working in a team is useful for learning and improvement.*
10. *Working in a group, you learn to be loyal, and to trust your colleagues.*

Regarding the weaknesses of group activities, the students highlighted the following:

1. *Group management in the tasks to be carried out.*
2. *The hardest part was decision-making.*

3. *There was only one computer for both groups.*

While 35,77% of the participants preferred to work individually. The strengths for individual work were the following:

1. *Freedom of choice.*
2. *Development of creative abilities.*
3. *Concentration and attention on the task.*
4. *Organising learning according to one's own pace.*
5. *Freedom to work.*
6. *Freedom of time.*
7. *Personal organisation skills to understand the goals.*

However, the difficulties in working individually were: 1. Use of the computer due to low skills and 2. accomplishing the task alone when you have ADHD - Attention Deficit Hyperactivity Disorder.

In any case, for both working modalities (in groups or individual), the experience was considered interesting and motivating, mainly in performing research.
The outcome of the work delivered to teachers was mostly a PowerPoint presentation (27,64%), video (21,95%) and essay (18,50%). The others (31,71%) used Kahoot, Microsoft Word, and PDF.
Regarding the evaluation system to be used at the end of the activity, 70,33% contributed to constructing the evaluation criteria for the outcomes with their teachers, compared to 26,42% who didn't.
With an average of 79,88% of the students, the motivation and the experience were very positive and engaging (Figure 23).

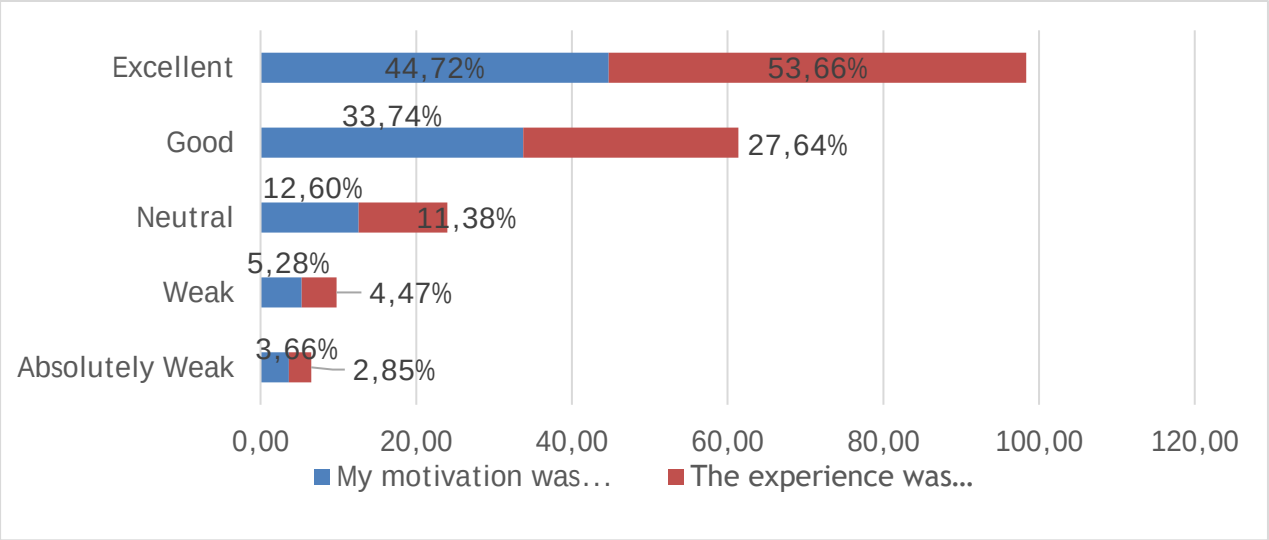
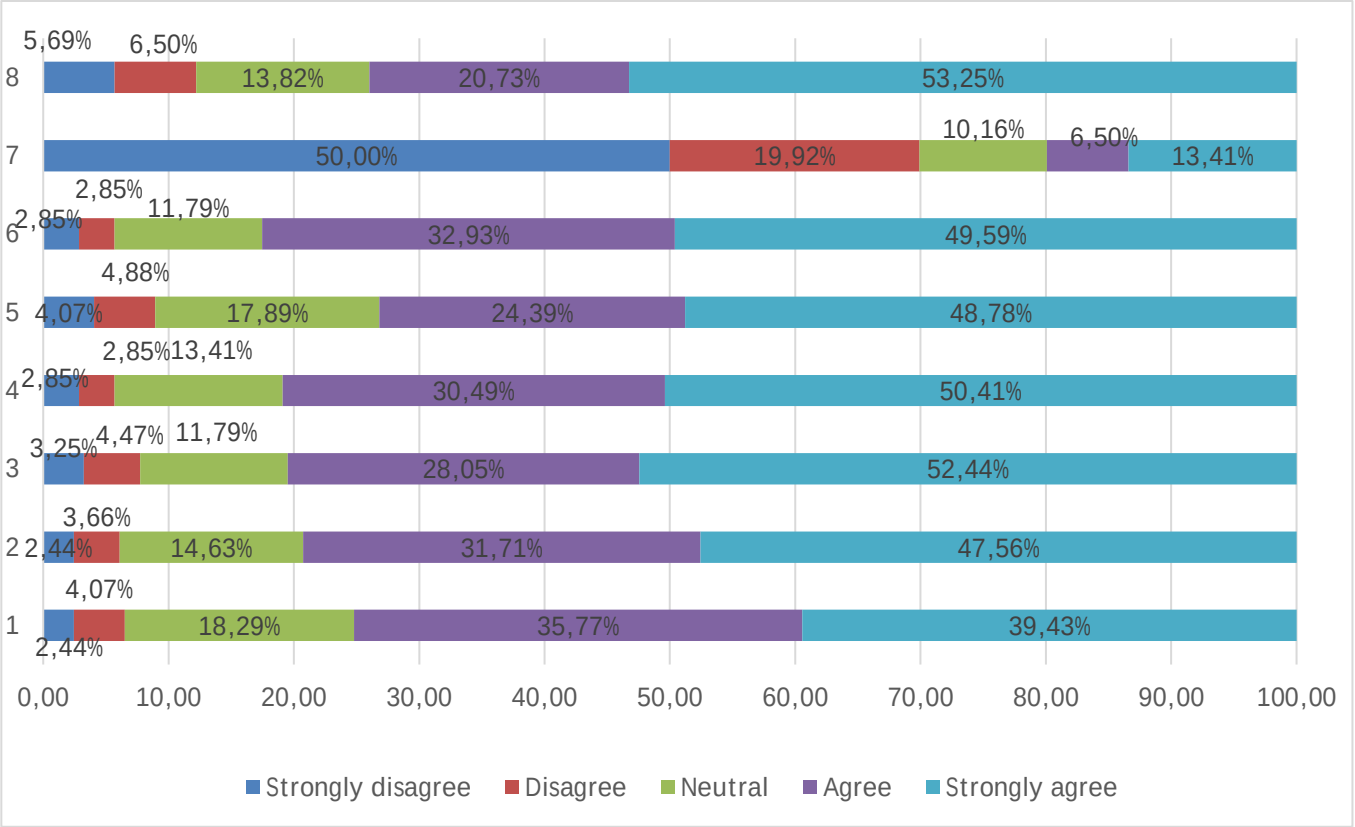


Figure 23. The evaluation of the students' motivation and experience.

As shown in the Figure below, after the project work, the students stated that the learning contents were more precise (75,20%), more concrete and practical than before (79,27%), and more accessible (80,49%) and involving (80,89%). The proposed methods allowed the learners to use their creativity and originality (73,17%). Therefore, they are considered as motivating for studying and learning new concepts (82,52%), and technology can help increase the interest in the topics studied. However, only 19,92% found these methods uncomfortable due to the necessity of having extra time to realise the outcomes.



1 - The learning contents delivered by the teachers have been more evident to me.

2 - The learning contents seem to be more concrete and practical than before

3 - The way to approach the topics to be studied makes the subject more accessible

4 - The way we approach the topics to be studied makes the subject more fun.

5 - The method used helped me use my creativity and be original.

6 - The method could be a good incentive to study and learn new concepts.

7 - I don't feel comfortable using this method.

8 - Using technology in the studies has increased my interest.

Figure 24. The evaluation of the learning experience during the project work realisation.

3. Description of the best practices realised

At the end of the project work realisation, the project team collected 23-project works realised during the piloting phase, by the students engaged. Among them, each partner, responsible for coordinating the piloting phase in their own country, selected two realised best practices. The selection criteria for these best practices were the following:

1. Using one of the digital tools suggested in the BoostClass 2.0 online training;
2. Language or STEM subjects to be studied in the project work.
3. Transferability and reusability.
4. Application of the project-based learning or the episodes of situated learning.

For more details regarding the realisation of the project work and, in general, with the piloting phase in each partner country (Italy, Bulgaria, Romania and Spain), the national reports were drawn up and published on the project website (https://www.boostclass.eu/outputs-and-recommendations-for-classes-20-implementation.php).

3.1 Italy

3.1.1 First Best Practice

GENERAL INFORMATION	
Title of your project work	HEALTH SERVICES IN ITALY
Author	CPIA 10 - Offices in Terracina and Fondi Teachers: Ivana Tibaldi, Alessandra Parisella, MarinaCargnelutti, Maria Assunta Cardillo, Maria Concetta Ciccone, Antonio Fedele, Francesco Giovanni Cofano, Antonio Zecca, Federica Dirusso, Isidoro Conca, Mara Carnevale
Project idea:	The project concerns the functioning of the Italian national health service, so it relates to real life as it makes students aware of their actions in the context of its public use, with particular attention to the Italian health organisation.
Driving Question:	What is the difference between the hospital, first aid, general practitioner, clinic, and private doctor?
Subjects	Sciences, Civic Education, Italian L2

Number of students	30
Time period/duration	6 Hours
Educational objectives	The main objective is to make students aware and autonomous in performing actions in the healthcare sector that may arise daily. Through this project, students should acquire communicative and pragmatic skills useful in day-to-day life and skills related to understanding and using health documents such as referrals and reports.
Resources and tools	The resources and online tools, such as videos and photos of authentic materials, will be useful to understand the context and use of the language.
Expected results	Being able to interact in the healthcare sector, such as booking a visit, talking to doctors or purchasing medicines.
Key competences	To know and use health sector documents, to know the various types of health services in Italy, and to know how to interact in specific contexts.

PROCEDURE
Activities
After an initial phase of brainstorming, we proceeded with tests for activating lexical and pragmatic knowledge. Subsequently, an understanding of the oral text was proposed, favouring interaction and cooperative learning. Finally, both written and then oral productions were proposed. Students worked both individually and as a class working in smaller groups. Students played the central role in learning, while the teacher only managed their communication exchange, facilitating the communication flow.
Monitoring
The teacher monitored the students' work through observation in the classroom.
Assessment
The assessment was focused on the pragmatic and social dimensions of the students.

3.1.2 Second Best Practice

GENERAL INFORMATION	
Title of your project work	FOOD AND SOCIETY: THE SUCCESS OF GOURMET PUBS
Author	Di Pirro Francesca, Fargiorgio Silvia, Maura Monica, Vittorelli Giovanna
Project idea:	The *Professional Institute for Food and Wine Services and Hotel Hospitality Celletti* in Formia, in particular, Class III P of the IDA course, wants to organise a themed evening: "PUB EVENING". The purpose of this event is to highlight the strong combination between food and society, which strengthens both hospitality and well-being. Students and teachers participate in the event, the average age between 17/64 years.
Driving Question:	How do your personal and community cultures influence how you interact with food?
Subjects	Administrative Law and Theory, French, Italian, English, Laboratory for Food and Wine Services Cooking sector, food science.
Number of students	All members of class III P
Period/duration	January/March
Students' final product link (video)	https://youtu.be/9t9IRW8DN1I

Educational objectives	SKILLS: - Allow the students to apply the knowledge learned in the courses to create a themed evening. - Know how to organise a themed event, autonomously choosing the steps to be carried out to create an original final product. - Establish links and comparisons between the disciplines involved. - Process foreign language texts from information collected to create a *gourmet* product. - Create a designed recipe in a foreign language. - Create an article or other technical document on healthy food and local products in a foreign language. - Learn how to recognise the cultural value of food and the relationship between gastronomy and society. - Promote the features of Regional, National and International cuisine. - Act within the quality system relating to the supply chain of interest. - Enhance and promote local, National and International traditions by identifying new supply chain trends. - Perform elementary calculation operations and calculate the distance between two points. - Know how to use IT tools for the realisation of multimedia materials. - Use basic procedures for preparing products/services/menus in the macro areas of activity that distinguish the supply chain, consistent with the context and needs of customers, in structured contexts. - Use management techniques to support the sales processes of products and services in compliance with quality parameters. - Identify geographically and historically different types of society and diets. - Know how to use writing skills for the product of a *gourmet* recipe and oral skills for a correct explanation of the procedure implemented. - Know the aspects of English culture and society. - Know the evolution of pubs and the diffusion of fish and chips. ABILITIES: - Know how to reconstruct the evolution of society over time. - Distinguish the characteristics of the market. - Identify market dynamics. - Find sources autonomously. - Interpret the results obtained.

	- Identify the stages of catering. - Apply the rules of resolution correctly. - Process calculation also using software tools. - Identify the cultural components of gastronomy. - Identify the contribution of foods in various cuisines. - Presentation and communication techniques. - Forms of commercial communication and advertising. - Identify the territory's agricultural food products to enhance the "made in Italy" brand. - Consciously buying food products is also based on territorial, commercial and environmental considerations. - Know how to express oneself orally in a foreign language in an understandable way by interacting in simple communicative situations. - Select and collect information from genuine sources of various nature: videos, websites and paper documents. - Use IT tools for the creation of multimedia materials. - Process written texts and oral productions. - Express personal preferences. - Identify information from simple written and oral texts on the topics studied.
Resources and tools	Cooking and dining area Labs Classroom Multimedia workshop Interactive Whiteboard Textbooks Links to corporate and institutional sites Diagrams and maps
Expected results	Creation of a power-point to present to participants for the valorisation and promotion of the event. Creation of finger food dishes, typical of this restaurant type.
Key competences	- Learning how to learn - Planning - Communication - Collaboration and participation - Acting in an autonomous and responsible way - Problem-solving - Identifying links and relations - Acquiring and interpreting information - Social and civic skills - Cultural awareness and expression

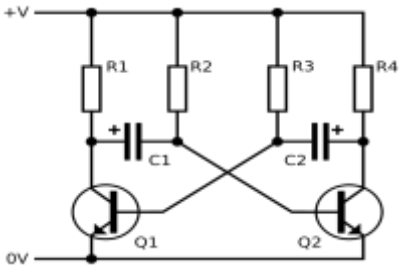
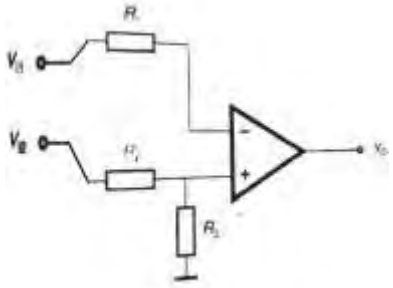
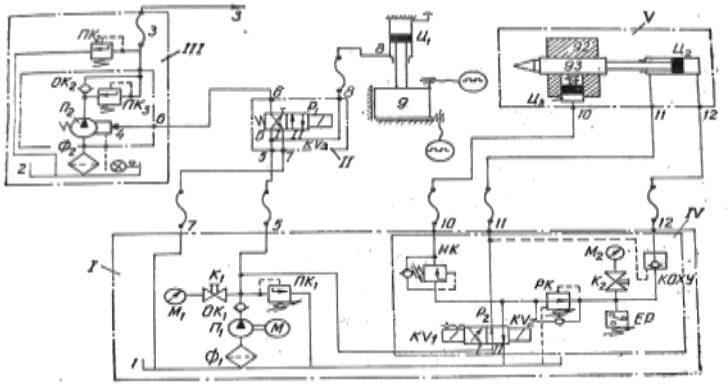
Procedure
Activities
The sharing of meaning: brainstorming to introduce the topic. Indications on the work to be performed: introduction to students, organisation of the work, distribution of tasks, the definition of periods, the subdivision of students into groups, filling in the entry self-assessment questionnaire. Training phase: collection and processing of information. Useful material is found through laboratory research and the analysis of authentic documents. Production phase: producing notes, maps, and various documents to develop a final product. Laboratory activities for the preparation of the dishes chosen for the event. Selection of the information and design of the project. Reflection phase: the progress of each student was shared with the class. Compilation of the post-assessment questionnaire. Monitoring of the model and the solutions obtained. Final individual and Group report of the materials produced with practical activity and oral interaction. Self-assessment phase: compilation of self-assessment forms with subsequent discussion and comparison of the input and output test data. The work with the students was carried out by dividing into small collaborative groups. On the day of the event, the class worked with the parallel classes in the dining area for the realisation of the event itself. The working procedure was laboratory teaching, and the above-described elements were used. The role of the students was active and allowed them to develop their autonomy, sense of responsibility, organisational skills and creativity. The role of the teachers was that of mediators and facilitators.
Monitoring
To monitor the students during the execution of the project. We used several grids such as the incoming self-assessment questionnaire and group activity diary. Use of disciplinary observation forms for monitoring the activities carried out: - Planning and time scheduling of activities - Observation forms for the group work carried out - Evaluation forms for general and specific competencies

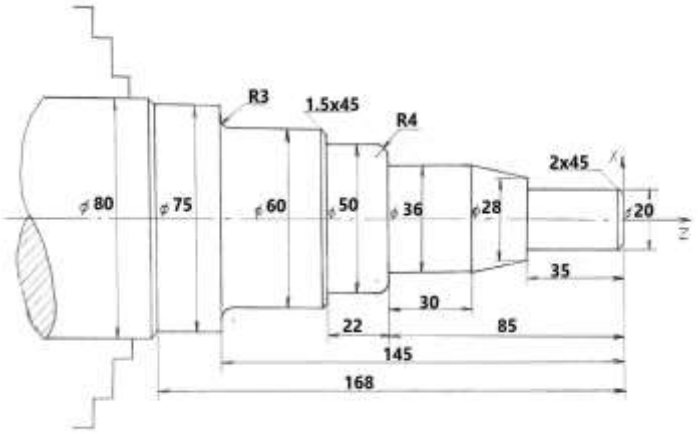
Assessment
Evaluation of the process • Student Self-Assessment – Students were given an incoming questionnaire to assess expectations and a post-activity questionnaire to assess the satisfaction achieved. • **Teacher's assessment:** - Organisation and functioning of group work; - Ability to ask questions relevant to the subject covered. Evaluation of the product • Product functionality and response to delivery and purpose; • Completeness and relevance of the documentation relating to the product. Disciplinary and/or interdisciplinary evaluation • The assessment of the students took place at the end of the UDA, taking into account the degree of responsibility and autonomy shown. The skills provided by the UDA were certified using the evaluation column. Students were also assessed in the individual disciplines involved.

3.2 Bulgaria

3.2.1 First Best Practice

GENERAL INFORMATION	
Title of your project work	DESIGN AND CALCULATION OF SCHEMES
Author	Neli Bogdanova
Project idea:	The purpose of developing a project is for the students to acquire professional competencies for: - Design of general-purpose engineering products; - Development of specific and real products satisfying operational requirements.
Driving Question:	How can we develop specific engineering products based on detailed operational requirements?
Subject	Mathematics, electrical engineering and electronics, mechatronics, metal cutting machines with CNC and occupational health and safety.
Number of students	10 Students
Time frame/duration	3 Weeks
Learning objectives	Solving a practical task related to the research and analysis of analogue and digital electronic circuits. Teamwork. Activation of cognitive activity to develop creativity and to form certain personal qualities.
Key competences	▫ Correct selection of appropriate measuring equipment for specific measurements; ▫ Correct connection of the measuring equipment; ▫ Accurate and true reporting of measurement results; ▫ Analysis of the measurement results and formulation of conclusions about the qualities and application of the various methods investigated elements and schemes; ▫ Work with CNC; ▫ Work with technical documentation and reference literature; ▫ Compliance with the requirements for health and safety working conditions when installing and setting up the schemes and working with different metal cutting machines.

Context/Problem/Scenario	TO BE MADE / PERFORMED: 1. To convert the number 1111 from binary to decimal code. 2. To convert the number 26 from HEX code to decimal 3. To convert the number 29 from code to binary and HEX. 4. To implement "Multivibrator" scheme given in Fig.1 WITH inputs R1= 1 KΩ, R2=22 KΩ, R3=23 KΩ, R4=1 KΩ, C1=100 µF AND C2=100 µF. To measure and report the amplitude and frequency of the signal generated at the output of the circuit.  Fig.1 5. To calculate the output voltage of the OP amplifier given in Fig. 2 with input data R1=1 KΩ, R2=1 KΩ, R3=1 KΩ, UVX1=5V, UVX2=2.5V. To implement the circuit and measure the current through the circuit, the voltage drop across R2 and R3 and the output voltage.  Fig.2 6. To carry out a calculation and tracking of the kinematic scheme of a CNC lathe according to the attached scheme of Fig.3  Fig.3

	7. To write a control program for machining the part of Fig. 4 - using the selected coordinate system, absolute coordinates and longitudinal turning cycle G71.  Fig.4 8. To enter the control program into the simulator.
Resources and tools	1. Reference literature 2. Calculator 3. Measuring devices 4. Oscilloscope 5. Simulator
Expected results	Project presentation

PROCEDURE
Activities
• Independently select and prepare the necessary measuring devices and elements for each specific case; • Correctly connect the necessary elements in the scheme; • Document and analyse the results of the studies and draw conclusions about the advantages and disadvantages of the studied elements and schemes; • To create and edit metal cutting machines programs with CNC to process a part; • Operate and adjust metal cutting machines to digital program control; • Work with reference literature; • Working with a simulator. On the principle of a raffle, the students chose a project on which they worked as a team. The start and the end dates of the project were set. During the development, the students presented a theoretical development, we discussed, confirmed the project's structure, and established the steps. They read, wrote, discussed and participated in problem solving i.e. took on higher-class tasks such as analysis, synthesis and evaluation, which allowed them to carry out different activities simultaneously and reflect on what they were doing. In the continuation three weeks,

the students developed and presented it to us and did a practical demonstration. They answered teachers' questions.
Monitoring
The students worked in the lessons on educational practice. They performed design and research work with a demonstration of the part-producing programs. The teachers gave consultations in order to implement the project successfully.
Assessment
The assessment was made during the development of the project, at the individual stages of the work on the project. In the end, the students presented the project to their classmates, answered questions (both from the teacher and their classmates) and were evaluated.

3.2.2 Second Best Practice

GENERAL INFORMATION	
Title of your project work	TRANSFORMERS - structure (construction), operating principle, classification and application
Author	Rumyana Momchilova
Project idea:	Getting to know the variety of transformers, their application and their importance develops responsibility and a positive attitude towards the profession. Tasks are set for the acquisition of STEM-skills/for the practical orientation of the training: the topic is entirely practical-oriented, real used chargers, bell transformers, measuring transformers, etc., which find applications in real life, will be examined.
Driving Question:	How can we use the transformers in the real life?
Subject	Physics, Chemistry, Electrical Engineering, Materials Science
Number of students	15 students
Time frame/duration	3 weeks
Learning objectives	Solving a practical task related to transformer research. Teamwork. Activation of cognitive activity, to develop creativity and to form certain personal qualities.
Key competences	- Formation of skills for independent training - Gathering information - Systematization and analysis - Logical and technical thinking. - Work with technical documentation and reference literature; - Compliance with the requirements for health and safety working conditions when installing and setting up the schemes, as well as working with different MM.

Context/Problem/Scenario	Organization: formation of 5 teams, 5 students each, who work on the following topics: • construction on the transformer; • operating principle. Groups work on types of transformers: in energy-power transformers; in laboratory conditions-autotransformers and measuring transformers; in industry and household - special purpose - welding, peak-transformers, boosters. Students will have to go through several stages in their work before preparing the presentation: • Choosing a role in the team • Search for information • Systematization and analysis of information • Shaping the ultimate product – presentation • Compose a short entertaining task
Resources and tools	• Educational and study-aid literature: textbooks, study aids. • Information technology: electronic based informative sources, communication channels, technical and technological documentation (diagrams, drawings, catalogues, reference and company literature, instructions, tables, diagrams, schedules, technological maps, directions, information) • Didactic tools and material: presentations, illustrations, real objects
Expected results	• Presenting the project • Presentation on the subject – comprehensiveness of presented materials • Precision at selection on the examples in accordance with the set task • Layout of the presentation. • Presenting the presentation in front of classmates • Originality of the entertaining task

PROCEDURE
Activities
• Definition of transformer and determination it as the only stationary machine in which quantities change at a constant frequency of the electrical network. • Overview of the construction of the transformer-active part (magnetic wire and coils). Other parts for cooling, control and management. • Overview of the operating principle of the transformer - the transformation coefficient.

- Overview of the different types of transformers (power, measurement, auto transformer, with special purpose) and their application.

The students chose a project on the principle on raffle, on which they worked as team. The start and end dates of the project were set. During the development, the students presented a theoretical development, we discussed, confirmed the structure of the project, and established the steps. Teams were formed - each student participates in the search and preparation of materials on the topic, one summarizes and synthesizes the information and one forming the presentation. Materials, clarification on the content of the project: what is a transformer, what the construction includes, operating principle, classification. Consultations for arising questions and difficulties.

A detailed explanation of the composition of an interesting class assignment, they read, write, discuss and participate in problem solving, i.e. take on higher-class tasks such as analysis, synthesis and evaluation, which allows them to carry out different activities simultaneously and reflect on what they are doing. In the continuation of three weeks, the students developed the project, presented it to us, and made a practical demonstration. They answered teachers' questions.

Monitoring

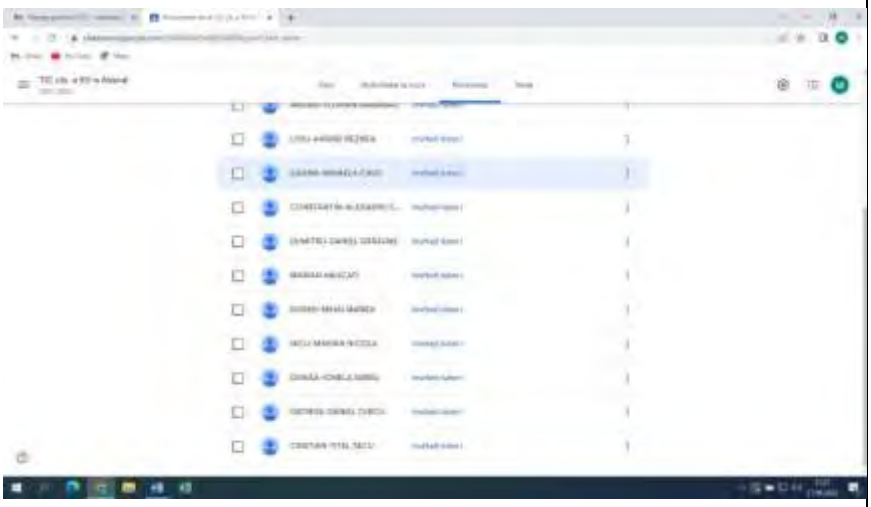
The students worked during educational practice lessons. They performed design and research work with a demonstration of the making of a detail program. Consultations were given by the teachers in order to successfully implement the project.

Assessment

The assessment was made during the development of the project, at different stages of the work on the project. At the end, the students presented the project to their classmates, answered questions (from both the teacher and their classmates) and were evaluated.

3.3 Romania

3.3.1 First Best Practice

GENERAL INFORMATION	
Title of project work	APPLICATIONS - DATABASES
Author	Florea Mihaela
Project idea:	Manage database applications using the Google Classroom platform. 
Driving Question:	How do we use databases and how to implement a database using specific software?
Subject	The objectives fulfilled in this work are: • Explaining the purpose of the procedures and conditions for using the databases. • Identify the software used with the components of the personal computer and their role. • Implementing the correct use of databases.
Number of students	11 students
Time frame/duration	4 weeks

Learning objectives	Explain the purpose, procedures and conditions of the use of databases. • Identifying database implementation procedures. • Identify procedures to protect equipment and prevent data loss. • Identify the software used with the computer components and their role. • Identify hardware tools and their role. • Identification of software tools and their role. • Identification of organizational components and their purpose.
Resources and tools	Laboratory rules • Online resources • School library • Computer system, printer • Video projector • Smart board
Expected results	An information document, word or pdf format. • Creating the ICT virtual class cls. XII Aseral and the management of activities within the Google Classroom platform
Key competences	Knowledge of the notion of databases. • Knowledge of the rules on defining fields, completing records, making graphs, implementing formulas. • Development and application of database skills.
Context/Problem/Scenario	Use of the Google Classroom platform during laboratory hours for the Information and Communication Technology module.

PROCEDURE
Activities
Analysis, creation and implementation of databases. • Extracting useful information. • Development of applications. • Presentation of the paper within the Google Classroom platform. • Question and answer session from the teachers and colleagues. Students went through the applications they worked on individually and as a team from a list of topics. • The start date and the end date of the project were set. • During the elaboration, the students presented the selected notions, we discussed, we validated the structure of the project, and we established the steps. • Weekly, the students presented the stage of the work, and at the end, they presented in the computer lab, using the smart board, the developed project. • Introduced the topic and answered questions.

Monitoring

Students worked at the hours allocated to the module.

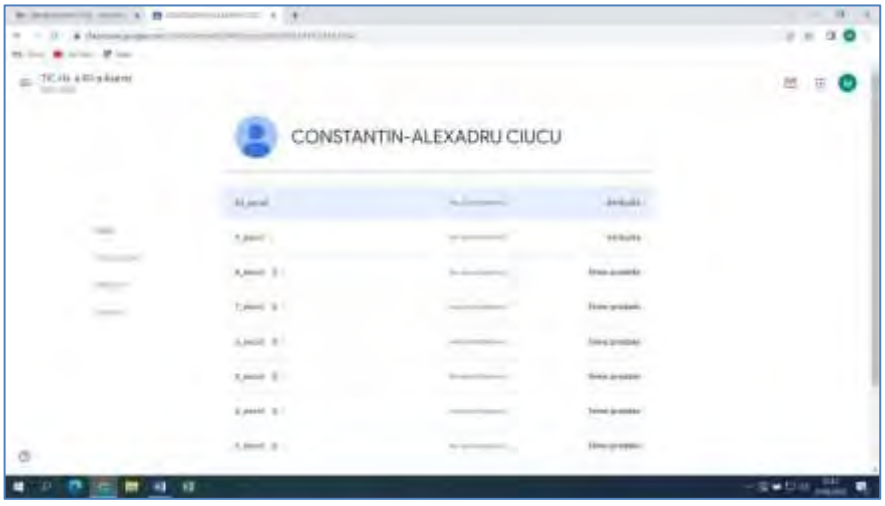
- They did research work both online and in the school's computer lab.
- They had access to the virtual board.
- The applications made were presented weekly, validated and then integrated by students in the work platform.



Assessment

The evaluation was made during the elaboration of the project, through the Google Classroom platform, by sending the realized applications.

- Example:



Also, at the end, the students filled in a form made with the help of google applicationsand were graded.

3.3.2 Second Best Practice

GENERAL INFORMATION	
Title of your project work	THE CAR LIFT
Author	Badalan Liviu
Project idea:	The teacher's role in the reverse class is to motivate students to speak, to provide feedback, to be supportivein practice and to encourage them to apply what they have learned in their daily lives. The teacher knows that in order for learning to occur, students need to see and hear their answers (share), receive feedback from the teacher, receive new information or explanations, practice to see if they have understood, see the connection between what they learnand life (applicability). By observing real models from the simulation provided, students will extract information and details recognizable of real observation of the elevator, being much easier to interconnect the theoretical part with the practical one.
Guided Question:	What are car lifts? Car lifts are devices capable of lifting cars to different heights, by means of a hydraulic unit, consisting of a pump and one or more hydraulic cylinders or by means ofa pair of electric motors. Consisting of both mechanical subassemblies and electronic components, an elevator can have several degrees of complexity of the mode of operation. From elevators with exclusively hydraulic operation, which use an actuating piston, in tandem with an executor and to the most advanced, which offers the possibility of adjusting the pressure with the help of precise software and a touch control panel, each modeladdresses a certain budget available. Regardless of the chosen option, however, the safety mechanisms embedded in an elevator have the role of ensuring an easy and risk-free handling. That is why elevators designed to take on a large load have the ability to engage in the locked position, withoutthe intervention of an operator, when the electronic system detects a certain fault. These devices also have the possibility of being switched off from a main switch, as well as an audible warning in the event of a danger during use.

Subject	The objectives fulfilled in this paper are: • Explain safe working procedures and conditions. • Identifying the types of elevators and their role. • Implement the correct use of elevators.
Number of students	15 students
Time frame/duration	2 weeks
Learning objectives	The project aims to strengthen the professional profile of students and improve the digital skills of young people, especially those at risk of dropping out of school. Rethinking teaching through practical activities enriched with multimedia simulations and the development of electronic skills for high school technology students increases the employment opportunities of young people. The main goal of the project: to experiment with theflipped classroom method, a pedagogical model that improves digital skills and schools' partnerships with companies on the labour market, and to use IT tools: surfing the Internet, consulting online resources
Resources and tools	Online presentation videos and online resources: https://www.autovit.ro/blog/elevatoarele-auto-ce-sunt-ce-rol-au-si-cum-functioneaza/ https://elevatorauto.ro/categorie-produs/elevatoare-auto https://www.youtube.com/watch?v=1wJ8RgUdpIY Think / Pair / Share Brainstorming Investigation Creative and simulation scenarios Micro-exposures, speeches
Expected results	An information document, word or pdf format. A power point presentation with the chosen theme.
Key competences	Knowledge of the notions regarding the car lift. Knowledge of the rules regarding the operation andsafety of the use of the car lift. Development and application of the skills of safe use ofthe car lift. Acquiring conceptual knowledge, cross-curricular skills and abilities, reflection and capacity for abstraction, critical and creative thinking, problem solving, effectivecommunication, use of electronic means.

Context/Problem/Scenario	The automotive field is one of the most receptive to technological developments, and this is not only seen on board cars. In recent years, service workshops have evolved both according to customer requirements and according to the technical specifications of increasingly complex models in terms of equipment. If diagnostic testers are already a common presence in most workshops, in terms of access to difficult areas under thecar, such as the gearbox or crankshaft, not all have the most modern equipment. There are still service units in which the norm is the inspection pit, even if it becomes more and more anachronistic. A car lift facilitates the work of mechanics and is an idealsolution for maximizing space and for students is how they can practice real situations in the professional context for which they are trained.

PROCEDURE
Activities

This concept proposes a new learning method, the teacher explains to the students that reversing the lesson means dividing the learning process into three stages:

1. Preliminary preparation: what the student does beforestarting learning. Examples: read or watch materials sentby the teacher, talk to other students, ask questions for class, or think about how new information interconnects with previous or future information.
2. The actual learning: what the teacher does concretelywith the students in the class. Examples: consolidation, explanations, teamwork, cross-assessment, games, exercises and even teaching new information.
3. Further learning: what the student does at home aftergoing to school and going through the first two stages. Examples: application of knowledge, reflection.

Course time: Flipped classroom method

We opted for a form in Google that included a short introductory video clip, followed by a question-and-answer session, and based on the answers; the class discussion was directed. The aim is not to mark the students in any way, but to arouse their curiosity and find out what they already know about the car lift.

Before the lesson:

- Video introducing the new learning concept with an integrated theme. Online exchange of ideas.

During the lesson:

- 15 minutes: The teacher and students review the topic.
- 35 minutes: workshop: students consolidate and deepen the new concept, collaboration; feedback colleagues-teacher.

After the lesson:

- Project, practical applications.

The characteristics of the flipped classroom method:

- The work task of students consists in their motivated engagement, with their own creative efforts, in the process of knowledge, and the themes given classically for the application and consolidation of the contents are performed in the collaborative activity in the classroom.
- They include reinforcing, explaining and encouraging discussions between students. The teacher prepared a presentation-support about the car lift, following to consolidate the basic terms and to offer more ideas to the students, through the theme of thinking: Watch this video. Write in your notebook 5 questions related to the operation of the carlift, which you would like to understand.

Monitoring
The students worked at the classes allocated to the module. They did the research workboth online and in the practice workshop. They had access to tool kits, tools, components, car elevator. The selected materials were provided online, validated and then integrated by the students in their final products.
Assessment
The evaluation was made during the elaboration of the project, through the weekly discussions on the assimilated information or the ambiguities. Also, at the end, the students gave oral presentations in class and answered questions (both from the teachers and from colleagues).

3.4 Spain

3.4.1 First Best Practice

GENERAL INFORMATION	
Title of project work	WRITE WITHOUT CHALK
Author	Noelia Cano and María José Rosado
Project idea:	Students were introduced to the use of the digital whiteboard through activities that allowed them to learn facts about Ukraine.
Driving Question:	Do you know Ukraine?
Subject	- Use of digital whiteboard - Web browsing
Number of students	20 students
Time frame/duration	Four sessions of 45 minutes timed in one week.
Learning objectives	- Initiate students in the use of the digital whiteboard as means to increase motivation and participation in the classroom. - Develop skills that allow them to make the most of technological resources in the classroom. - Promote collaborative work. - Collect information about Ukraine by the use of ICTs.
Key competences	- Competence in Linguistic Communication. - Digital Competence. - Learning to Learn. - Cultural Awareness and Expression.
Resources and tools	- Digital whiteboard - Projector - Classroom computer
Expected results	- Kahoot
Context/Problem/Scenario	We were in a group of students aged between 50 and 90, with little or no knowledge about the use of technology.

PROCEDURE
Activities
They worked as a single group and in small groups to search, select and organise information related to Ukraine by surfing the Internet. Students used the Google search engine to collect information, and they used that information to create questions related to the main topic, that is, Ukraine. Their classmates, through a Kahoot, answered those questions. - Activity 1: Getting to know digital Whiteboard. In this activity, we explained to the students the basic operation of a digital whiteboard and the elements that compose it. We began conducting a demonstration, teaching students how to grab the pencil from the digital whiteboard, enter the browser, and perform a search. - Activity 2: Searching for information by browsing the Internet. We worked jointly with the students to perform searches on the Internet. The students suggested the words they would write to find information about Ukraine and took into account the buttons they had to press to perform this search. - Activity 3: Elaborating the questions for the Kahoot. After collecting the required information in the previous session, the students worked in groups of 4 to elaborate on the questions that their mates had to answer. - Activity 4: Solving the Kahoot.
Monitoring
The monitoring of the students was carried out mainly through direct observation of their work, guiding and solving all the doubts that arose during the process.
Assessment
To verify that the learning objectives were achieved, it was taken into account that the students were able to solve the Kahoot appropriately and adequately.

3.4.2 Second Best Practice

GENERAL INFORMATION	
Title of project work	MUSEUMS OF MADRID: The National Archaeological Museum.
Author	Lara María Rico Vega
Project idea:	The idea of the project was based on the acquisition by students of the necessary skills to know the history and operation of the National Archaeological Museum, its location in the city, the key works the museum has, in which rooms they are located and the knowledge of the resources offered by its website.
Driving Question:	Do you know the National Archaeological Museum?
Subject	Knowledge about Museums in Madrid.
Number of students	8 students
Time frame/duration	Second term. Two sessions of two hours each for the students to make the presentation and one hour for its presentation.
Learning objectives	Web browsing. File download. Creation of email accounts. Basic email management. Basic use of word processors.
Resources and tools	1. Computer room. 2. Internet connection. 3. Programs to make presentations (Power Point, Google Slides, Canva). https://drive.google.com https://www.canva.com/es_es/ 4. Main web pages: http://www.man.es/man/home.html https://www.google.es/maps/?hl=es
Expected results	Once the presentation has been prepared, the student must give a short oral presentation in class.
Key competences	Cultural Awareness and Expression Digital Competence Competence in Linguistic Communication Learning to Learn Sense of Initiative and Entrepreneurship
Context/Problem/Scenario	Second-year students of the FPB sociolinguistic field of the Casa de la Cultura Adult Education School in Getafe (Madrid) were the recipients of the project to put into practice the knowledge acquired in the previous course.

PROCEDURE
Activities
Elaboration of a PowerPoint presentation or similar must contain the structure that the teacher has marked in a script uploaded in the Virtual Classroom of the subject. The presentation consists of 4 parts: 1. Prepare the route to be able to go to the museum from Getafe by public transport. 2. Choose three elements of the museum and prepare a presentation. 3. Research the history of the Archaeological Museum. 4. What other museums are there in the city of Madrid? Have you visited any? What is your favourite? Why? Include a photo/video. Through applications such as Google Maps and the Museum's own websites, students must be able to complete all the sections of the script. It was individual work that must be carried out during two sessions of two hours each in a classroom equipped with computers. After completing the work, the students presented their presentation briefly in another one-hour session. The work consists of preparing a presentation in PowerPoint or similar following the following instructions: 1. Prepare the route to be able to go to the museum from Getafe by public transport: a. Departure time and estimated travel time. b. Route possibilities (train, train and metro, train and bus) and transport schedule. c. Map of the chosen route. 2. Choose three elements of the museum and prepare an exhibition: a. What is it. b. What's it called. c. Epoch. d. Room where we can find it. e. Description. f. Explanation. g. Photos. h. Personal opinion. 3. Research the history of the Archaeological Museum: a. When was it founded? b. Who founded it? c. Why was it founded? d. What are your main collections and pieces? e. Photos. 4. What other museums are there in the city of Madrid? Have you visited any? What is your favourite? Why? Include a photo/video.

5. The tools are the following:
    a. Computer room.
    b. Internet connection.
    c. Programs to make presentations (Power Point, Google Slides, Canva...)

https://drive.google.com
https://www.canva.com/es_es/
Main web pages:
http://www.man.es/man/home.html
https://www.google.es/maps/?hl=es
During the first hour, the students know-how to handle a program to make presentations was supervised, and the main sections of the Museum's website were analysed.
Once the students understand these two questions, they had 3 hours to carry out the work, one of which was devoted to researching the Museum's own website and the remaining two, to choosing the pieces and making the presentation.

Monitoring

Parts of monitoring by the teacher:

- During the first hour, the students worked with the basic tools, such as the web to make presentations (there should be no problem, because they learned it the previous year) and Google Maps, and in the following hour they browsed the Archaeological Museum's website in order to learn about its history and the resources it offers. Then, in the remaining two hours, they choose the pieces of the work and give the oral presentation.
- At all times, the teacher supervised the work of the students and answered any questions they may have had.
- The recurrent doubts were recorded in a document to resolve them collectively.
- Students who have more competency skills and who were helping their classmates spontaneously were targeted.

Assessment

The evaluation consists of two parts:

- PowerPoint presentation (or similar).
- Oral presentation.

For both evaluations, rubrics were used. In this way, it was known in a more objective way if the previously indicated learning objectives were achieved.

4. Feedback and suggestions from the target groups

According to the teachers/educators, the proposed methodology alternates moments of individual work with cooperative learning and group work by favouring the inclusion and moments of reflection on the practical use of language. The interactive activities encourage students' motivation. However, sometimes low technical support, low digital skills of the students, or the internet connection could slow down the development times of the works produced by the students. Moreover, some classes include several elderly students without literacy or minimal previous schooling. In this case, the technology could generate a negative attitude to the topics due to social and cultural aspects.

In this case, the learners need the help of their teachers, mainly for their low digital skills. Students are not always comfortable working together because better ones tend to monopolise the work or seek refuge in the group by delegating their duties to other peers. In addition, shyer students could be insecure, mainly when they have to present their works orally in front of the class.

However, the interdisciplinarity of the training path realised uses more engaging and motivating methodologies and teaching strategies for students that require, on their part, greater participation in the construction of stable and lasting learning processes.

In any case, the interdisciplinarity is recognized as an important factor which can promote the development of complex thinking aimed at the links between the different disciplines and the resolution of problematic situations with the aim of factual collaboration among peers.

The encouragement of collaboration and shared planning between the learners, as well as between teachers, therefore determines a holistic vision of the students' educational project.

Once designed the planning for the project work, it can be re-used or re-adapted for other educational contexts, for example to favour a more productive inclusion of students with special needs.

In brief, the following aspects were revealed as strong points: socialisation, interaction, personal satisfaction, active participation of everyone involved, creativity, desire to learn, mutual enrichment, belief in what one does, commitment, punctuality, and organisation.

At the same time, as a strong point, the greater motivation, the more playful aspect presented by this new approach, led the students towards greater creativity, a more rational

approach, equipping them with new skills, while observing greater cooperation and help among equals in the face of each other's difficulties.

In particular, working on a project, students are supported in:

- the motivation stimulation for work and participation in activities;
- the development of critical thinking;
- the formation of specific competences and attitudes, such as the detection of problems and development of alternative options for solving them;
- the formulation of specific goals;
- the planning activities;
- reflection, self-control, self-assessment and evaluation.

From the students' point of view, they thoroughly enjoyed using digital resources, mainly producing the videos, working in groups, making their learning more playful and searching for new information. However, a few students found it difficult to make decisions on the work and speak in front of the class, present the final work realised, and work on the project with the available equipment. For example, there were only a few computers at a school. In addition, what they didn't like included: the short time to read and analyse the responses; the use of the digital whiteboard and the computer; the preparation phase; searching for information on the Internet and making tables and collecting data.

However, the elements the students enjoyed most are listed below:

- *The method used.*
- *Quiz.*
- *The approach to the homework.*
- *Brainstorming and investigation.*
- *The final presentation in front of colleagues.*
- *Everything. It was a new, interesting experience that I would like to repeat.*
- *Themed approach.*
- *Finding information about the museum.*
- *Making the PowerPoint.*
- *The interactivity.*
- *Being able to collaborate with the other students.*
- *Using an electronic device.*
- *Using the technologies.*

- *Seeing the finished work.*
- *Sharing with the teacher and everyone.*

References

1. Redecker, C., *European framework for the digital competence of educators: DigCompEdu*. 2017, Joint Research Centre (Seville site).
2. Ferrari, A., *DIGCOMP: A framework for developing and understanding digital competence in Europe*. 2013, Publications Office of the European Union Luxembourg.

ANNEX 1 – APPLICATION FORM

Application Form

Please, compile the following application form to participate in the course "Boosting Class 2.0 for high-quality teaching in adult education" realized in the framework of the Erasmus+ BoostClass 2.0 Project

Ref. 2020-1-IT02-KA204-079329.

DATA PROTECTION AND PROCESSING:
The data collected through this submission form will be used strictly in line with the objectives of the BoostClass 2.0 project. Personal data (first name, last name, email address) collected via this submission form will be used by BoostClass 2.0 Partnership only the training purpose and processed in compliance with the EU Regulation 2016/679 "General Data Protection Regulation" and with the current national laws concerning the personal data protection. The interested party may exercise the rights referred to in art. 13 GDPR 679/16.

The data collected through this submission form will be used strictly in line with the objectives defined above. Such processing is based on your consent to these terms and conditions, which is recorded by marking the yes box the last question of the form. Should you wish to exercise your right to correction, erasure, restriction or portability of your data or just wish to know what personal data we hold on you, please contact us.

Your personal data will not be shared outside of BoostClass 2.0 Partnership and it will be deleted 1 year after the end of the project or if you have not given or revoke your agreement to be included in the database. Except where this is indicated in the terms of Google Privacy Policy, your information is not intended to be transferred to destinations outside of the EU/EEA (European Economic Area), although it may be accessible to parties outside the EU/EEA via online media and websites. However, an exception might also be where you are located outside the EU/ EEA and we need to follow-up with you regarding your submission.

In addition to the above, the form may be subject to the terms and conditions in Google Privacy Policy, which may be consulted at https://policies.google.com/privacy?hl=en.

*Campo obbligatorio

1. Name and Surname *

2. Country *

3. Name of your school/institution/organisation

4. Email: *

5. What requirements do you have?

Seleziona tutte le voci applicabili.

- [ ] Full time employers for at least one year.
- [ ] Have learners with difficulties also in language subjects
- [ ] Have a high interest or motivation to participate in the piloting phase

6. I agree to the Terms and Conditions, including the data processing as stated in the beginning of this form.

Contrassegna solo un ovale.

- ( ) Yes, I agree
- ( ) No, I don't agree

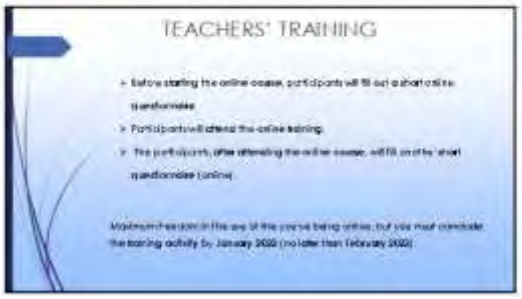
Thank you! The replies are automatically saved; therefore, no confirmation of receipt will be sent by e-mail. However, the credentials to access the platform will be sent as soon as possble by the National Training Team.

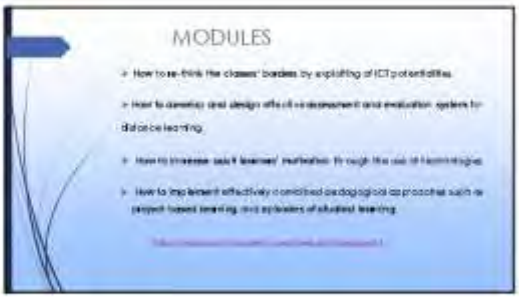
ANNEX 2 – COURSE PRESENTATION – LAUNCHING TIME

05/08/2022

1


SECOND OUTCOME
BOOSECLASS 2.0 ONLINE COURSE


TEACHERS' TRAINING


MODULES


PROJECT WORK IMPLEMENTATION


EDUCATIONAL CONTENT
Multimedia lesson
Powerpoint presentation

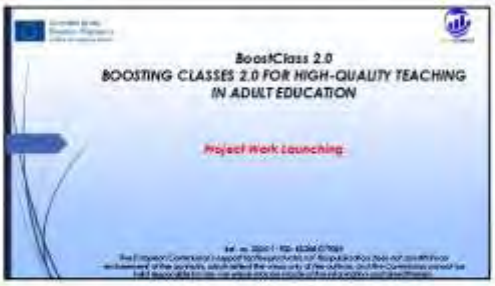

FINAL CERTIFICATE

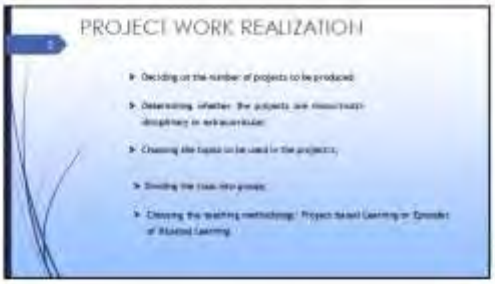

NEXT STEPS


Time for questions…
Thank you for your attention!

ANNEX 3 – PROJECT WORK PRESENTATION – LAUNCHING TIME

05/08/2022





1

FOURTH STEP - EVALUATION

PROJECT EVALUATION	▪ Present project results and process documents	PowerPoint presentation, video, blog, event	Final peer evaluation, teacher feedback and final considerations and review of the evaluation rubric

At the end of the activities, students must complete the following questionnaire: [illegible]

FINAL STEP – TEACHER REPORT

Project Works should be uploaded here :
[illegible]

Drawing up the final report and send it to email:
[illegible]

FINAL CERTIFICATION

At the end of the training, students will receive a certificate of participation.

- filling out a questionnaire - before the training activity.
- Participation in the training activity.
- filling out a questionnaire - after the training activity.
- Realization of the project work with their students.

30 hours will be recognized including training and testing activities.

NEXT STEPS

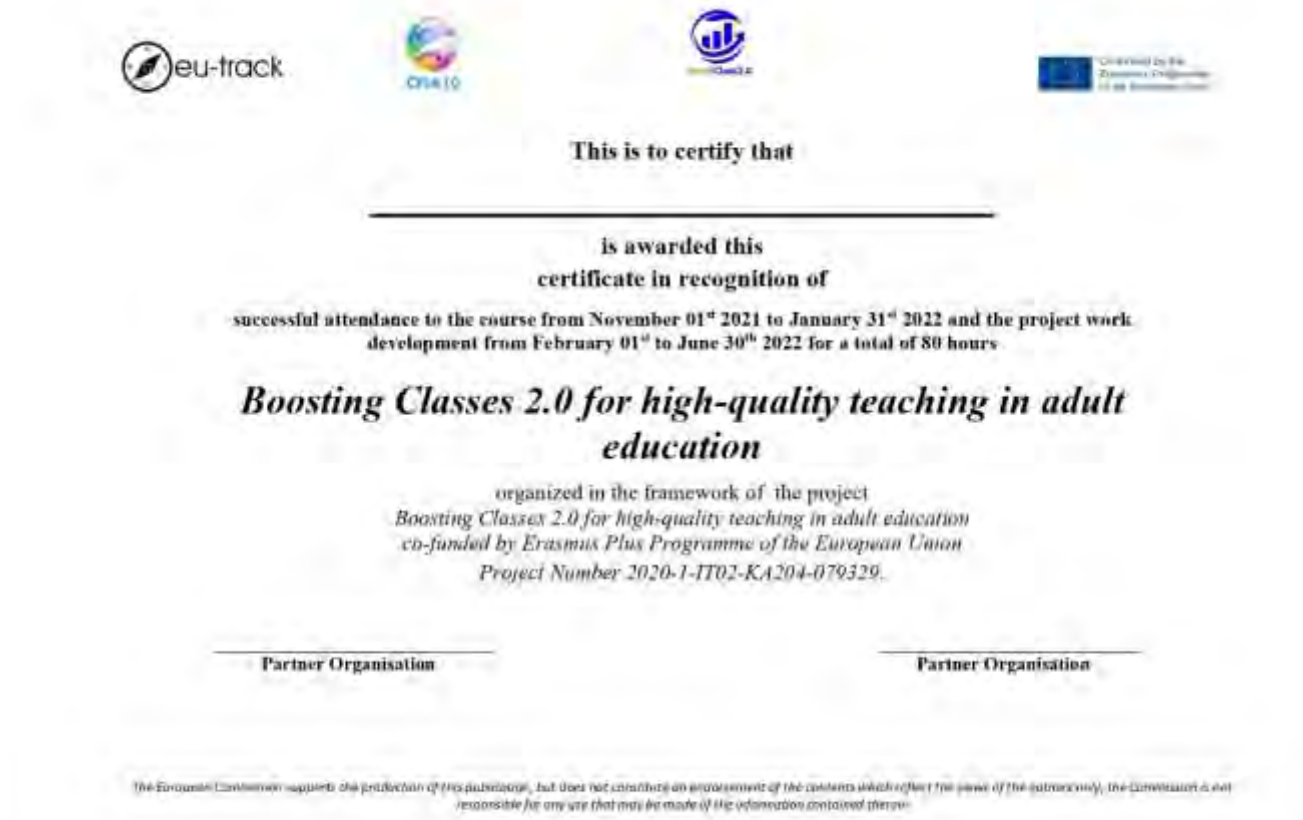
1. The guidelines on how to realize the project work is available here:
[illegible]

2. Templates to prepare the teachers report is available here:
[illegible]

3. Student questionnaire to be compiled:

Thank you for your attention!

ANNEX 4 – BOOSTCLASS 2.0 ATTENDANCE CERTIFICATE



This is to certify that

_____

is awarded this
certificate in recognition of

successful attendance to the course from November 01st 2021 to January 31st 2022 and the project work development from February 01st to June 30th 2022 for a total of 80 hours

Boosting Classes 2.0 for high-quality teaching in adult education

organized in the framework of the project
Boosting Classes 2.0 for high-quality teaching in adult education
co-funded by Erasmus Plus Programme of the European Union
Project Number 2020-1-IT02-KA204-079329.

Partner Organisation **Partner Organisation**

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ANNEX 5 – PRE-PILOTING QUESTIONNAIRE FOR TEACHERS

Dear Participant,

We kindly ask you to fill in the following questionnaire, prepared for the data collection before starting your training *BoostClass 2.0 for high-quality teaching in adult education* inside the BoostClass 2.0 Learning Environment.
Thank you in advance for your collaboration in this task that only requires a few minutes, and we hope you will help the BoostClass 2.0 Project Team to improve the project results and their impact.

BoostClass 2.0 Project Team

1. Country

_____

2. Where do you work? Please, specify the main sector (one only option):

- □ Educational services
- □ Socio-educational services
- □ School system
- □ Vocational training services
- □ Employment services
- □ Citizens' organisation linked to educational initiatives
- □ Voluntary and cultural associations
- □ Other

3. Subjects taught

_____

4. How many years have you been working as a teacher/educator in the adult sector?

- □ 0-5
- □ 6-10
- □ 11-15
- □ +15

5. Do you use technology in the classroom?

□ Yes

□ No

If yes, which technology/technologies do you use?

1. Collaborative Environments (e.g. Google Apps, Drive)
2. Collaborative web site/blogs/notes
3. Interactive whiteboard
4. Virtual classroom (e.g. Google meet)
5. Other, please specify_____

6. How **do you assess and evaluate your students' performance at distance learning?**

1. Using Quizzes
2. Using games
3. Using a rubric
4. Other, please specify_____

7. Are you comfortable using technologies in the classroom to increase stud**ents'** motivation?

□ Yes
□ No

If No, please, describe the reasons_____

8. How do you evaluate your current digital competencies?

Select a competence level between A1 and C2, where A1 is the lowest and C2 the highest.

- Newcomers (A1) - you have very little contact with digital tools and need guidance to expand your repertoire.
- Explorers (A2) - you have started using digital tools without, however, following a comprehensive or consistent approach.
- Integrators (B1) - you use and experiment with digital tools for a range of purposes, trying to understand which digital strategies work best in which contexts.
- Experts (B2) - you use a range of digital tools confidently, creatively, and critically to enhance your professional activities.
- Leaders (C1) you rely on a broad repertoire of flexible, comprehensive and effective digital strategies.
- Pioneers (C2) - you are an expert in using contemporary digital and pedagogical practices.

9. Have you ever used the project-based learning approach in your classroom?

□ Yes

□ No

If no, please describe the reasons_____

If yes, please write three (3) most important things in your mind regarding the use and importance of project-based learning in your professional work:

1. __

2.___

3.___

10. Have you ever used episodes of the situated learning approach in your classroom?

□ Yes

□ No

If no, please describe the reasons_____

If yes, please write three (3) most important things in your mind regarding the use and importance of episodes of situated learning in your professional work:

1. ___

2.____

3.____

11. Please write the three (3) most important knowledge fields and skills you expect to acquire from training:

1. ____

2._____

3. ____

ANNEX 6 – POST-PILOTING QUESTIONNAIRE FOR TEACHERS

This self-assessment questionnaire provides feedback and suggestions helpful to identify the main stages in the personal development path for innovative teaching.

The e-course "Boosting Class 2.0 for high-quality teaching in adult education" was designed to promote and implement the integration of new technologies in adult education. The training was structured into four modules, as follows:

1. How to re-think the classes' borders by exploiting ICT potentialities.
2. How to develop and design an effective assessment and evaluation system for distance learning.
3. How to increase adult learners' motivation using technologies.
4. How to effectively implement combined pedagogical approaches, such as project-based learning and episodes of situated learning.

1. After participating in the BoostClass 2.0 training course, how do you evaluate your current digital competencies?
   Select a competence level between A1 and C2, where A1 is the lowest and C2 the highest.

   - Newcomers (A1) - you have very little contact with digital tools and need guidance to expand your repertoire.
   - Explorers (A2) - you have started using digital tools without, however, following a comprehensive or consistent approach.
   - Integrators (B1) – you use and experiment with digital tools for a range of purposes, trying to understand which digital strategies work best in which contexts.
   - Experts (B2) – you use a range of digital tools confidently, creatively, and critically to enhance your professional activities.
   - Leaders (C1) you rely on a broad repertoire of flexible, comprehensive, and effective digital strategies.
   - Pioneers (C2) - you are an expert in using contemporary digital and pedagogical practices.

2. Which of the following knowledge fields and skills do you think is most useful for your teaching activity?

   1 = Extremely unimportant, 5 = Extremely Important

   a) How to re-think the classes' borders by exploiting of ICT potentialities.

   Extremely unimportant 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ *Extremely important*

   b) How to develop and design an effective assessment and evaluation system for distance learning.

   Extremely unimportant 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ *Extremely important*

   c) How to increase adult learners' motivation using technologies.

   Extremely unimportant 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ *Extremely important*

   d) How to implement effectively combined pedagogical approaches, such as project based learning and episodes of situated learning.

   Extremely unimportant 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ *Extremely important*

3. How functional are the BoostClass 2.0 learning materials and teaching suggestions for your everyday practice?

   1=Absolutely not useful, 5 =Extremely useful

   Absolutely not useful 1 ○ 2 ○ 3 ○ 4 ○ 5 ○ *Extremely useful*

Please, explain the motivation of your choice:

_____

_____

4. Was the learning environment of Boostclass 2.0 easy to use?
   1=Absolutely difficult, 5 =Extremely easy

Absolutely not useful	1	2	3	4	5	*Extremely useful*
	○	○	○	○	○	

Please, explain the motivation of your choice:

_____

_____

SECTION: REFLECTION ON THE MONITORING AND EVALUATION SYSTEM AND DIGITAL TECHNOLOGIES

5. Do you think you can use digital assessment tools to monitor and evaluate students' progress?

   □ I don't monitor students' learning progress with digital tools.

   □ I believe I can use the online quiz to check students' progress.

   □ I often use a variety of digital tools to track students' progress.

   □ I systematically use a variety of digital tools to track students' progress.

6. What tools do you use to monitor and evaluate the performance of your students in distance learning?

   □ Quizzes

   □ Games

   □ Rubrics

   □ Other, specify_____

SECTION: REFLECTION ON THE STUDENTS INVOLVEMENT IN THE USE OF TECHNOLOGIES

7. Do you think you will use digital technologies to let students participate actively in the classroom?

□ In my institute/organisation, it will be not possible to actively involve students.

□ I can actively involve students, but I will not use digital technologies.

□ In my teaching practice, I will use stimulating materials such as videos and animations.

□ My students will use digital tools in the classroom, e.g. spreadsheets, games, quizzes

□ Students will systematically use digital technologies to investigate, discuss and create knowledge.

8. Do you think you will assess your students' learning through digital content production, e.g. videos, audio recordings, photos, digital presentations, blogs, wikis?

□ In my institute/organisation, it will be impossible to assess the students' learning in such a way.

□ I don't think it will be easy to do it with my students.

□ I will do it sometimes, as a game activity.

□ The creation of digital content by students will be an integral part of their studies.

□ Being an integral part of students' learning, I will systematically increase the level of difficulty to further develop their skills.

SECTION: REFLECTION ON THE IMPLEMENTATION OF PBL AND ESL METHODOLOGIES

9. After the training, what is your general knowledge, skills and competence regarding the two methodologies proposed in adult education?

a. I have a general understanding and knowledge of PBL methodology implementation.

1= Very low, 5 = Very high

Very low 1 2 3 4 5 *Very high*

b. I have a general understanding and knowledge of ESL methodology implementation.

1= Very low, 5 = Very high

	1	2	3	4	5	
Very low	○	○	○	○	○	*Very high*

c. I have the competence to use PBL methodology.

1= Very low, 5 = Very high

	1	2	3	4	5	
Very low	○	○	○	○	○	*Very high*

d. I have the competence to use ESL methodology.

1= Very low, 5 = Very high

	1	2	3	4	5	
Very low	○	○	○	○	○	*Very high*

10. Do you think PBL sessions will be feasible in your classroom?

□ YES

□ NO

If No, please explain the motivation:

_____

_____

11. Do you think ESL sessions will be feasible in your classroom?

□ YES

□ NO

If No, please explain the motivation:

_____

_____

ANNEX 7 – TEACHER'S REPORT

BoostClass2.0

Boosting Classes 2.0 for high-quality teaching in adult education

Ref. cod. 2020-1-IT02-KA204-079329

BoostClass 2.0 Project Work

Teacher Report

Co-funded by the
Erasmus+ Programme
of the European Union

GENERAL INFORMATION	
Title of your project work	
Author	
Learning objectives *What are the main objectives of your project? Try to be specific, particularly in terms of competencies and skills you hope your students will gain through this project.*	
Key competences *List here the key competencies to be taught and assessed.*	
Context/Problem/Scenario *(Please, explain the context/problem/scenario of the project work to be realised)*	
Project idea: *Please, describe your project and explain how it connects with real-life (max 10 sentences)*	
Driving Question:	
Subject *Which subjects are relevant to this project?*	
Number of students *How many pupils altogether are going to participate in the project?*	
Time frame/duration *What is the time frame of this project?*	

Activity *Provide an overview of the activities that you planned and achieved for this project.* *State how you intended to work with students*	
Resources and tools *What tools and resources will be required? Choose and list the tool(s) and explain how you will use them in the extended description of the activities below.*	
Expected results *Indicate here if you are planning a final product or action.*	

PROCEDURE
Activities • *Provide an overview of the activities that you are planning for this project.* • *State how you intend to work with students. If you want to create teams of students or collaborate with other schools or classrooms, please provide relevant information.* • *Describe the procedure of work, the tools you will use, and explain the role of the students and your role.*
Monitoring *Describe the activities carried out to monitor the students during the project execution (e.g. observing the students' work in class including social dimension, using logbook or similar documents where you can also register your follow up activities based on your observation and spontaneous feedback from your students, etc.)*
Assessment *How has the students' outcome has been evaluated? Which tools have been used to evaluate the students' outcome at the end of the PW? How would you know if the learning objectives have been achieved?*

CONCLUSIONS FOR THE METHODOLOGY IMPLEMENTATION IN THE CLASSROOM

Weak points:

Strong points:

ANNEX 8 - STUDENT QUESTIONNAIRE AFTER THE PROJECT WORK IMPLEMENTATION

Dear Student,

We kindly ask you to fill in the following questionnaire prepared for the data collection after completing your training *BoostClass 2.0 for high-quality teaching in adult education* inside the BoostClass 2.0 Learning Environment.

Thank you in advance for your collaboration in this task that only requires a few minutes, and we hope you will help the BoostClass 2.0 Project Team to improve the project results and their impact.

BoostClass 2.0 Project Team

SECTION: GENERAL INFORMATION

1. Country (where you are attending the training):

_____

2. How old are you?

- ☐ Under 25
- ☐ 25-29
- ☐ 30-39
- ☐ 40-49
- ☐ Over 50
- ☐ I prefer not to answer

3. Gender

- ☐ Female
- ☐ Male
- ☐ I prefer not to answer

4. Please write the name of the school or the organisation where you are attending the training/course/lessons:

_____

5. Please describe the learning environment where you are attending the training/course/lessons by expressing your opinion for each of the following statements:

   a. There is an interactive whiteboard in every classroom

      1= Absolutely disagree, 5 = Absolutely agree

      Absolutely disagree 1 2 3 4 5 *Absolutely agree*

   b. In the classroom the students can use different digital devices (laptops, tablets, and smartphones).

      1= Absolutely disagree, 5 = Absolutely agree

      Absolutely disagree 1 2 3 4 5 *Absolutely agree*

   c. **The school's internet connection is stable and fast**

      1= Absolutely disagree, 5 = Absolutely agree

      Absolutely disagree 1 2 3 4 5 *Absolutely agree*

   d. The students have access to networked digital devices at home.

      1= Absolutely disagree, 5 = Absolutely agree

      Absolutely disagree 1 2 3 4 5 *Absolutely agree*

e. School management supports digital technologies integration in the classroom.

1= Absolutely disagree, 5 = Absolutely agree

Absolutely disagree 1 2 3 4 5 *Absolutely agree*

f. The subject studied promotes and supports the use of digital technologies in the classroom.

1= Absolutely disagree, 5 = Absolutely agree

Absolutely disagree 1 2 3 4 5 *Absolutely agree*

g. Many of my fellow students use digital technologies in the classroom.

1= Absolutely disagree, 10 = Absolutely agree

Absolutely disagree 1 2 3 4 5 *Absolutely agree*

SECTION: REFLECTION ON THE PROJECT WORK IMPLEMENTATION

6. Did you manage the project work individually or in a group?

- Individually
- In a group

7. What kind of outcome did you deliver to your teacher?

- Video
- Power point presentation
- Blog/website
- Essay
- Other, please specify_____

8. If you produced the outcome individually, please, describe the strengths or difficulties that occurred during the learning process:

   Strengths

   _____

   Difficulties

   _____

9. If you produced in a group outcome, please, describe the strengths or difficulties that occurred during the learning process:

   Strengths

   _____

   Difficulties

   _____

10. Did you participate with your teacher in the construction of the evaluation criteria for the outcome?

    ☐ Yes
    ☐ No

DURING THE PROJECT WORK IMPLEMENTATION:

11. Please provide your opinion related to participation in this new experience.

    a. My motivation was...

       1= Absolutely Weak, 5 = Excellent

Absolutely Weak	1	2	3	4	5	*Excellent*
	○	○	○	○	○	

b. The **experience was…**

1= Absolutely Weak, 5 = Excellent

	1	2	3	4	5	
Absolutely Weak	○	○	○	○	○	*Excellent*

12. Please describe your learning experience during the project work:

a. The learning contents delivered by the teachers have been more evident to me.

1= Strongly disagree, 5 = Strongly agree

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	*Strongly agree*

b. The learning contents seem to be more concrete and practical than before.

1= Strongly disagree, 5 = Strongly agree

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	*Strongly agree*

c. The way to approach the topics to be studied makes the subject more accessible.

1= Strongly disagree, 10 = Strongly agree

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	*Strongly agree*

d. The way we approach the topics to be studied makes the subject more fun.

1= Strongly disagree, 5 = Strongly agree

Strongly disagree 1 2 3 4 5 *Strongly agree*

e. The method used helped me use my creativity and be original.

1= Strongly disagree, 5 = Strongly agree

Strongly disagree 1 2 3 4 5 *Strongly agree*

f. The method used could be a good incentive to study and learn new concepts.

1= Strongly disagree, 5 = Strongly agree

Strongly disagree 1 2 3 4 5 *Strongly agree*

g. I don't feel comfortable using this method.

1= Strongly disagree, 5 = Strongly agree

Strongly disagree 1 2 3 4 5 *Strongly agree*

h. Using technology in the studies has increased my interest.

1= Strongly disagree, 5 = Strongly agree

Strongly disagree 1 2 3 4 5 *Strongly agree*

13. Please, express your overall judgment on the activities carried out.

a. Which phase of the activities did you like most?

_____

b. Which phase of the activities did you like least?

_____