



### PILOTING FLIPPED CLASSROOM MODEL

The aim of the working package was to have the quality of the learning material, the e-learning environment and methodology validated by the representatives of the target group – teachers and trainers of the vocational education in the target countries, in Hungary and Spain.

Besides the novel learning content (the flipped classroom methodology), the innovative feature of the course was the extensive use of Open Educational Resources, the practice-oriented, ‘learning-by-doing’ approach and the intensive guidance for the participants – what is not usual in e-learning courses. Each mentor – teacher of the partner organizations, prepared for this task before the pilot started – was responsible for a group of maximum 10-12 participants. The mentors were always present, helping to get over technical difficulties, encouraging teachers to join the discussions, and grading the submitted assignments – sometimes with exhaustive and motivating feedbacks – and facilitating a collaborative atmosphere in which the teachers were willing to share their knowledge with each other, which doesn’t happen too frequently among the teaching staff of regular school departments<sup>1</sup>.

The aim of the curriculum developers was to build a learning path that could lead teachers on the way from ‘discovery to delivery’: they learned about the method, they prepared for applying it, then they tried it out and reflected on it. After the 1<sup>st</sup> module (PLAN) they were asked to develop a first idea about how they could apply the method in their own pedagogical environment. In the 2<sup>nd</sup> module (BUILD) they had to create or collect motivating digital learning contents and prepare to flip the lesson. In the 3<sup>rd</sup> module (OPERATE) they were asked to create a lesson plan for the flipped classroom (with detailed description of the learning goals, didactic aims, working methods and activities of students) and, based on the plan, they had to carry out their own pilots with their students.

Some examples of digital learning content prepared by the teachers in the pilot course are accessible in the following playlist:

<https://www.youtube.com/playlist?list=PL5JWJo7RGWMjGTjoKPKrg3GnADxfSp4Bc>

The pilot test was run in the target countries, in Hungary and in Spain, and, as an extra task, in the Czech Republic as well. There were 136 registered users from Hungary, 69 from Spain and 83 from the Czech Republic.

The participants highly appreciated the collaborative atmosphere of the course; instructors, mentors and participating teachers were equal partners in the forum discussions. Spain has also overcome the originally targeted number of 30-40 participants, as they had 67 registrations to the course. And although no course

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<sup>1</sup> The latest international studies on the effectiveness of the e-learning course stated stronger guidance could improve success rate which is very low all over the world: the average drop-out rate reported in 2018 was 40-80%, that is, often only 20% of the participants complete the course (eLearning industry, 2018). The success rate of the Hungarian course was 72%, which is a value to be proud of!

## FLIPPED CLASSROOM METHODOLOGY IN VOCATIONAL EDUCATION

was planned for the Czech Republic, the University of Hradec Králové Faculty of Education has also delivered the online course to 1<sup>st</sup> and 3<sup>rd</sup> year university students who are going to be primary school teachers. 63 pre-service students registered, who found the FC method suitable for younger learners as well.

The successful completion of the course was awarded with certificate only in Hungary, as iTStudy accredited the curriculum following the rules of the teachers' further training system. 76 of the 106 registered teachers (72%) closed the course as certified "innovative teacher".

The impact can be measured by the teachers' reflections. The case studies clearly prove that we succeeded in mediating a fundamentally new concept of teaching in the 21<sup>st</sup> century in which the focus is not on the technology but on the pedagogy. The teachers reported their own "flipping classroom" experiment to be a real turn from frontal teaching into student-centered, active and collaborative work with students, where the power of ICT tools served didactic goals.

### FEEDBACKS ON THE COURSE

#### SPAIN

"From a pedagogical point of view, it was a very good experience for teachers, since it allowed them to bring the prepared contents from home, so the programs were more agile, and they were able to dedicate more time to practice and problem solving. From a methodological point of view, it allows us to plan contents tailored to the participants of the program, and to carry out continuous evaluation."

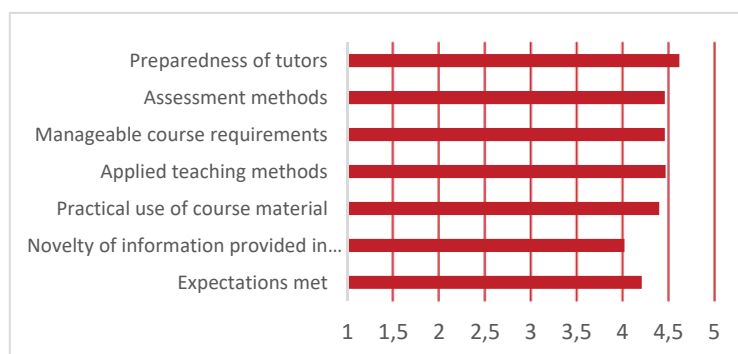
"The benefits are that students feel more participative, they are the ones who look for and read information to finish the activity and complete it with my help."

"It is a more collaborative way of learning where everyone contributes to the contents, and as a teacher it was easier to transmit the concepts to students."

#### HUNGARY

The course was highly successful. In the evaluation, participants praised the technical background, the video tutorials, the mentors' work as well as the learning material that they considered practical and useful.

Hungarian teachers stated that our e-learning method was behind their success. During the online course, instructors, mentors and course participants were handled as peers with similar professional backgrounds, exciting debates were generated on pedagogical problems, and questions emerged about the topics they were learning.



*"Although I had little time, I always entered it curiously in the evenings to read the comments. Whenever I had problems, I always received immediate answers, so I could proceed in my learning process. The forum provided the intimacy of contact courses and contributed to motivation as well."*

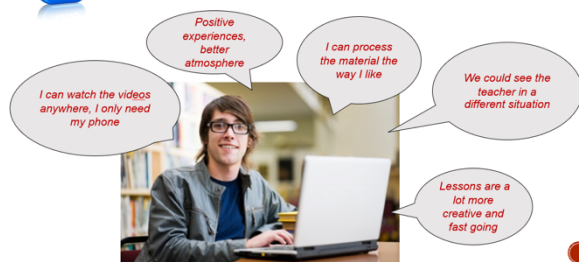
intensive knowledge-sharing and cooperation started in the online community, which is quite unusual in the general practice among the teaching staff of schools. The impact and even the sustainability can be built on this community, whose members asked us not to

close the e-learning platform, as they intended to use the contents they put together collectively during the course.

### FEEDBACKS OF STUDENTS ON FLIPPED CLASSROOM



#### WHAT DO YOU LIKE IN THE METHOD?



As part of the international survey led by the Flipped Learning Network, 296 students evaluated the flipped method based on their experiences gained during the lessons held by teachers participating in the online course.

80% of the respondents said that they experienced a more positive and frequent cooperation with the teacher as opposed to a traditional lesson.

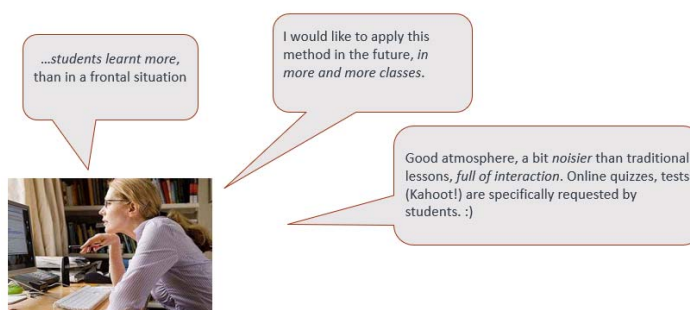
Most students reported positive feelings about the flipped method after their first lesson. They welcomed the support they got for learning outside of school with the help of technology. They liked the varied activities in the classroom and they claim that they learnt more in these classes than in other, traditional classroom situations.

### TEACHERS ABOUT FLIPPED CLASSROOM MODEL

As part of the international survey led by the Flipped Learning Network, 49 Hungarian teachers evaluated their own flipped lesson, delivered as part of the online course.

For the majority of the teachers the method was new, not many of them had applied any of the active learning methods consciously and regularly before. They saw various benefits of the method when applying it, such as: increased cooperation among students and with the teacher; development of critical thinking; learning is more active, experimental; students are now responsible for own learning process; easier differentiation; improved student-teacher relationship.

#### DESCRIBE YOUR OWN FLIPPED LESSON



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## FLIPPED CLASSROOM METHODOLOGY IN VOCATIONAL EDUCATION

### PROJECT INFORMATION

Experiments are being run all over the world about how best to introduce new, innovative teaching, learning methods that meet the requirements of the 21st century. One of these methods is the 'Flipped Classroom'.

The aim of the project is to integrate the "flipped classroom" method into the pedagogical practice of the VET schools and training centers in the partner countries. The long-term aim of the project is to improve the quality of the vocational education and to engage a movement towards the work-based, collaborative and problem-oriented learning/teaching by utilizing the pedagogical potential of ICT tools.

### PROJECT OBJECTIVES

- Review the theoretical studies and pedagogical experiences on Flipped Classroom method
- Carry out a needs-analysis by involving the teachers of the partner countries
- Elaborate the "Flipped Classroom Methodology" (textbook, curricula, online training for VET teachers)
- Pilot online course in the partner countries by involving VET teachers
- Validate the results in VET schools by involving students

### TARGET GROUPS

Primary target group: VET teachers

Secondary target group: VET students

### PROJECT BASICS

Acronym: Flip-IT!

Grant agreement number: 2015-1-HU01-KA202-013555

Title: Flip-IT! - Flipped Classroom in the European Vocational Education

Duration: 1 September 2015 – 31 August 2018

Program: ERASMUS+

Participating countries: Hungary, Ireland, Spain, United Kingdom, Czech Republic

Website: [flip-it.hu](http://flip-it.hu)

### COORDINATOR

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