

# Flipped Classroom Online Course **Syllabus**

# 1. Basic identification data

1.1	Course title	Flipped Classroom	
1.2	Course identifier	FCCO - Flipped Classroom Course Online	
1.3	Target group	Teachers working primarily in vocational education (but all interested teachers are welcome)	
1.4	Form	Online course in Moodle-environment	
1.5	EQF level	6	

### 2. Introduction

Experiments are run all over the world about how to introduce new, innovative teaching, learning methods that meet the requirements of the 21st century. One of these methods is the "flipped classroom". Flipping means in this case, that working with the material to be taught does not go according to the traditional way with the teacher explaining what to learn. It starts with a special pretask, which is the processing of the topic in advance. Flipping the class familiarizes students with crucial content and "How-to"s before class so they have more time to immerse themselves in real-life, hands-on learning during class. The learner watches a thought-provoking video that is connected to the topic, elaborates the given topic and collects questions related to the lesson with the help of the teachers' requests, hand-outs. Various methods can be used, e.g. the Cornell method of note taking). During the lesson, the teacher manages the process of learning, mainly in groups. Experience proves that this method means a significant shift from the traditional teacher centred teaching towards the learner-centred, tailor-made teaching. The main emphasis in FC falls on the pedagogy, not on the technology.

### What can I acquire at the course? What can I learn?

Participants will learn on-line about the pedagogical background of the flipped classroom methodology and will be aware of the whole process from designing the lesson, through searching for, choosing and/or creating digital content to using it, including assessment of the learners' performance. Having finished the course, the participants will be able to use ICT tools (video, animation, presentation creating programs) to create and share digital content and will be able to find and to use free content found on the internet. Theoretical and practical knowledge, skills and competences can be acquired in five major areas:

- Pedagogical planning based on FC model
- Building or developing digital content for the lessons, and
- Operating, that is conducting the lesson, analysing end evaluating the results
- Planning required training, promoting self-development
- Creating institutional-level conditions and workgroups involving teachers





# 3. Knowledge areas

Area	Title			
Plan	Pedagogical design of applying FC methods			
Build	Preparation and content development for FC classroom			
Operate	Implementation and running of FC lesson			
Enable <sup>1</sup>	Planning required training, promoting self-development			
Manage	Creating institutional-level conditions and workgroups involving teachers			

#### 4. Modules

4.1 PLAN - Pedagogical design of applying FC methods				
4.1.1	Rationale			

The aim of the first module is to provide theoretical background on flipped classroom method. It helps teachers to identify the pedagogical concept and the innovative features of flipped classroom, and to evaluate its value against the traditional, frontal teaching methods. This module enables them to develop the first idea to apply FC in their teaching environment.

4.1.2 **Learning Outcomes** 

At the end of the course the participants will be able to analyse the possibility of applying flipped classroom method in their teaching context, they will be able to select the field, topic of the subject relevant for teaching with FC and aligning with the needs and learning attitudes of their students. They will be able to describe the technical and pedagogical learning environment of an FC lesson and develop a draft idea of their 1st flipped classroom lesson.

4.1.3 **Topics** 

- P1. Historical overview, basic concepts of Flipped Classroom.
- P2. The place of flipped classroom model among the classical learning theories.
- P3. Worldwide experiences, good practices.
- P4. FC method as a tool to reach and teach the Net-generation.
- P5. Combining FC with other pedagogical methods (like group working, project-based learning).

4.1.4 Knowledge

- Describe the pedagogical and methodological fundaments of the FC method.
- Summarize conclusions based on the history of the FC.
- Recognise the results and experiences from other European countries.
- Identify other methods (e.g. group work, project methods) usable with FC.

<sup>&</sup>lt;sup>1</sup> Not implemented in this syllabus





**Skills** 4.1.5

- Able to fit his/her pedagogical methods to the needs of the age group, learning style of the
- Able to build on learners' strengths, potentials and preferences (by taking into account their backgrounds, cultures, interests, goals, skills and prior knowledge) as crucial resources and drivers for motivation for creative learning.
- Able to transfer the pedagogical theories into the daily classroom work
- Able to teach for creativity and teaching creatively.

**Competences** 4.1.6

- Open to technical novelties and informs about the latest ICT tools and methods.
- Open to new teaching methods relevant to develop 21st century skills of the students.
- Able to redesign his/her lesson management strategy.
- Cooperate with other teachers to share knowledge for testing new methods, for developing.
- Able to recognize and meet the needs of changing groups containing learners of various abilities.

4.2 **BUILD** Rationale 4.2.1

The second module is about collecting and developing motivating digital content for the students to learn as homework before the classroom. The participants will be able to find and select open educational resources (OERs) relevant to their special subject and didactic aims. They will learn and practice how to work with freely available applications and web 2.0 tools and to create motivating multimedia contents, presentations, videos, animations and publishing them online by using Creative Common licenses.

4.2.2 **Topics** 

- B1. Open Educational Resources, Creative Commons
- B2. Web 2.0 applications for flipped classroom
- B3. Creating effective and attractive presentations
- B4. Designing and editing video, animation, presentation
- B5. Video and animation editing tools, from PPT to MOV/MPG
- B6. Creating and publishing hypertext and hypermedia.

4.2.3 **Learning Outcomes** 

At the end of the module, the participants will be able to compile the recourses (digital tools and learning materials) for the flipped lesson. They will collect, design and create source materials (digital contents, videos, presentations, animations) aligned with the didactic aim of the lesson, and they will be able to share them with students online before the lesson.





- Explain the basic copyright issues, and the concept of Open Educational Resources.
- Describe the advantages of web 2.0 tools in education.
- List the criteria of the effective and motivating presentation.
- List and describe the basic functions of a selected video editor.
- Define the concept of hypertext and identify the main tags used in HTML.
- Explain methods and tools for sharing content on social media.

4.2.5 **Skills** 

- Able to search the Internet for open educational resources
- Apply web 2.0 tools for creating and sharing interactive learning materials.
- Able to use offline and online application for creating educational content.
- Create, edit and publish videos, animations.
- Create, edit and publish hypertexts containing multimedia elements.

#### **Competences** 4.2.6

- Able to use ICT tools with great self-confidence for creating and sharing digital learning materials in different format.
- Able to classify the different ICT tools and select the most relevant for improving the effectiveness of teaching with FC.
- Able to associate the technology with his/her pedagogical aims in teaching a special topic while planning FC lesson.

4.3	OPERATE
4.3.1	Rationale

The aim of the third module is to prepare the participants for utilizing the potential of flipped classroom method in a practice-oriented approach, starting with lesson planning and closing with self-reflection after conducting the classroom work. The most important goal of this module is to make clear, that the focus of the flipped classroom method is not the technology but the pedagogy.

Based on the outcomes of the first two modules (the essay on draft idea about using FC, compiling digital materials for the selected topic), the participants elaborate a lesson plan with defining the didactic aims, designing parts of the lessons, the students' activities and working forms and the assessment of the students' performance.

They will be asked to evaluate how far the goals could be achieved, and to make a self-reflection based on the feedback of the students.

4.3.2

- O1. Basic concept and rules of lesson planning.
- O2. Developing motivation strategy.
- O3. Special requirements of planning for FC method.
- O4. Assessing learners' performance in flipped classroom.
- O5. Pedagogical assessment, self-reflection.





#### 4.3.3

#### **Learning Outcomes**

At the end of the module the participants will be able to create a detailed plan for flipped classroom method, with effective classroom management and motivation strategy. They will be able to define the goals of the lessons, the special skills and competences the lesson intend to develop, and to describe the performance assessment methods they will use. They will be able to make pedagogical evaluation (collecting feedback from parties involved: learners, parents, other staff members), and self-reflection about the first experiences using flipped classroom method.

4.3.4 **Knowledge** 

- Describe the parts of a lesson plan and the typical components of each part.
- List the typical didactic aims related to flipped classroom method.
- Explain the importance of planning activities, working methods and motivation strategy.
- List the possible risks of an ICT based lesson and explain how to handle them.
- Describe the assessment methods relevant for FC methods.
- List the tools and general rules of the pedagogical evaluation and self-reflection.

4.3.5 **Skills** 

- Able to create a lesson plan based on FC method.
- Able to make motivation plans and accomplish them during the lessons.
- Able to use pedagogical tools for implementing participative learning.
- Able to use assessment methods relevant to FC method.
- Able to use tools and methods for evaluation of the lesson.

**Competences** 4.3.6

- Able to plan, manage and evaluate a lesson by using flipped classroom method, combining it with other relevant pedagogical methods if needed.
- Able to redesign his/her pedagogical strategy based on the conclusions in order to continuous improvement of the effectiveness of the teaching –learning process.

# 5. Responsibilities of participants

List of activities, test, projects, common works, which will be made by the participants and their weight.				
5.1	Active cooperation on online learning interfaces, participate in forum discussions, keeping learning record.	10%		
5.2	PLAN:  (1) Develop a first idea on how the participant will apply FC method in his/her special teaching environment (subject, topic, age group, other circumstances and conditions) underlined with the pedagogical and didactic aims.  Submission form: structured online text, based on a common template	20%		





	BUILD:	
5.3	<ol> <li>Collecting free content to the given topic, introducing their use Form: digital text handed in on the online platform</li> <li>Selecting a web 2.0 tool, introducing its use Form: digital text handed in on the online platform</li> <li>Optional: Creating own digital content to the given topic (video/animation/presentation).</li> <li>Submission form: sharing the digital content in the database of the online platform and write a summary by reasoning the pedagogical/didactic aims of the selected tools/contents.</li> </ol>	30%
5.4	OPERATE  (1) Planning the lesson (2) Preparation and realization of the complete teaching-learning process (3) Conducting of the lesson, reflection (4) Assessment of the learner, reflection (5) Pedagogical and methodological evaluation of the experiment  Submission form: summary of the experiences and conclusions and upload it by using an Word template	40%
	Total:	100%

# 6. Assessment methodology and performance criteria

6.1	Methods	Evaluation is based on the evaluation of the exercises. Activity and learning task will be evaluated by the tutor.
6.2	Certificate of Achievement	The certificate shall be issued
6.3	Threshold for success	min. 60%
6.4	Successfully completed	61% - 80%
6.5	Excellently completed	81% - 100%

# 7. Training duration

# Training period and workload

The course is fully run on the internet, and although the participants can decide about timing to a certain extent, we define the time interval for the course and deadlines to hand in the individual tasks for the sake of successful cooperation and knowledge sharing. Cooperation and professional consultation is impossible without simultaneity.

7.1	Duration	8-10	weeks
7.2	Estimated workload	6-8	hours/week





# 8. Prior knowledge/experiences, entry prerequisites

Lists of compulsory completed modules/ expected prior knowledge/competences to be successful

8.1 Basic knowledge and use of ICT-tools and office software suites

# 9. Coaching

Correct definition of the roles and duties of the actors working together during the course						
Actor	Responsibilities					
The instructor is the professional leader of the course, author of (the person can vary according to topics). Duties:  o give the tutors professional support; o supervise and evaluate the activities during the course; make a summative report about the course using the retained the tutors and the feedback of the participants.						
9.2 Mentor	Learning activities are supported by the mentor. One mentor assists the learning activities of 10 participants. The mentor helps the participant to complete the individual tasks, finding the way on the online interface.  o tracks the learning process keep contact with the participant; o gives advice about the learning methods, gives technical help about the online interface; o organise and help the project; o evaluate the task sheets; o at the end of the course makes a, evaluation report to the instructor.					
9.3 Administrator	Ensure the perfect operation of the framework (LMS). Solves problems of the network communication and technical problems of the network 8 working hours a day.					
9.4 Secretary	Responsible for the administration, e.g. contracts, certificates, personal problems (cancel, delay).					

# 10. Learning environment, delivery methods, supporting materials

Short description of the learning environment, handouts, guides supporting the learning activities

10.1 Online learning  10.2 Study guides	<ul> <li>The learning environment is Moodle e-learning framework that can be accessed by the username and password given by the tutor.</li> <li>An introductory guide is available for those who are not familiar with Moodle framework. It presents orientation, communication, possibilities for co- operation and ways of handing in the tasks.</li> <li>Progress is assisted by short learning guides published weekly/two-weekly. These guides describe the objectives in the given period. The learners can control these periods according their own needs, possibilities.</li> </ul>
10.3 Content	Most of the materials, educational videos are hypertexts, available through the platform, but occasionally further internet sources may be necessary.  The URL to these materials are given by the tutor.





# 10.4 Tasks to achieve credits

The participants work and receive the assessment online. Among the tasks there will be tests, essays to be written on the interface, documents to be uploaded or other digital content.

# 11. Quality management

The methods and processes to evaluate the results during and at the end of the module. The aim of these tools is to compare the original aims (what we intended) learning objectives with the realized product (what we get).

### 11.1 Data collection

# 11.2 Methods of

validation

- 1. Feedback on the course from the participants.
- 2. Number of dropouts, reports of the tutors and the instructors.
- 3. Results of the qualified participants based on Moodle statistics.
- 4. Moodle statistics about activities. (number of comments, activities, etc.) Report on the certificates (on completing the course) based on the collected data to process the results and to suggest modification.

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Web: http://flip-it.hu/en



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#### **Partners**

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# Glossary of terms

#### **EQF** glossary

For the purposes of the Recommendation<sup>2</sup>, the definitions which apply are the following:

- (a) 'learning outcomes' means statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence;
- (b) 'knowledge' means the outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual;
- (c) 'skills' means the ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments);
- (d) 'competence' means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy.

# **Digital learning element**

Synonym: learning object. One piece of knowledge/information created by the author for educational aim. Digital learning element are delivered (stored) in standard digital formats (txt, jpg, htm, xml, etc.). The medium of delivery could be picture, text, audio, video, animation.

### **Bloom's Taxonomy**

http://oct.sfsu.edu/design/outcomes/index.html

"Within the cognitive domain, Bloom's Taxonomy defines six levels, from the simplest behavior to the most complex. When describing behaviors, take a look at the list of measurable words in the charts below:"

#### Level 1: Information or knowledge

Show that you know:

Cite	Identify	Name	Recognize	State
Count	Indicate	Point	Record	Tabulate
Define	Label	Quote	Relate	Tell
Describe	List	Read	Repeat	Trace
Draw	Locate	Recite	Select	Write

# Level 2: Comprehension

Show that you understand:

**Estimate** Illustrate Report Associate Convert Classify Describe Expand Interpolate Restate Compare Differentiate Explain Interpret Review

<sup>&</sup>lt;sup>2</sup>RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (Text with EEA relevance) (2008/C 111/01)





Compute	Discuss	Express	Locate	Summarize
Contrast	Distinguish	Extrapolate	Predict	Translate

# Level 3: Application

Show that you can use what you have learned:

Apply	Demonstrate	Interpolate	Practice	Schedule
Calculate	Dramatize	Interpret	Predict	Sketch
Choose Procedures	Employ	Locate	Relate	Solve
Collect Information	Examine	Operate	Report	Translate
Complete	Find Solutions	Order	Restate	Use
Construct	Illustrate	Perform	Review	Utilize

### Level 4: Analysis

Show that you perceive and can pick out the most important points the material / presentation:

Analyze	Criticize	Diagram	Generalize	Organize
Appraise	Debate	Differentiate	Infer	Question
Conclude	Detect	Distinguish	Inspect	Separate
Contract	Determine	Experiment	Inventory	Summarize

# Level 5: Synthesis

Show that you can combine concepts to create an original thought or idea:

Arrange	Construct	Formulate	Manage	Prescribe
Assemble	Create		J	
Collect	Design	Generalize	Organize	Produce
	Detect	Integrate	Plan	Propose
Compile	Detect	Invent	Prepare	Specify
Compose	Develop			- F

#### Level 6: Evaluation

Show that you can judge and evaluate ideas, information, procedures and solutions:

Appraise	Contrast	Develop	Measure	Revise
Assess	Criteria	Estimate	Rank	Score Select
Choose	Critique	Evaluate	Rate	
Compare	Decide	Grade	Recommend	Test
Conclude	Determine	Judge	Recommend	rest

# Words to avoid

Avoid using these words and phrases when writing objectives:

Appreciate	Grasp the significance of	Loarn
Be comfortable with	Have faith in	Learn
Believe	Internalize	Recognize Understand
Enjoy	Know	Understand

