



**Facilitating e-Learning for an Inclusive Pedagogy**  
 2021-1-SK01-KA220-VET-000034712



**Project Result 1**

**e-FLIP Teaching Model**

**Traditional Flipped Learning**

The Flipped Learning education model was created by two chemistry teachers in the USA, who decided to shoot a video of the experiment for a sick student who missed the class. Then, they saw that other students also copied the video CD and watched the experiment. Therefore, they decided to shoot videos and give CDs to all students before the class, so that they watch before coming to class and do the experiment together in class.

The Flipped Learning is based on the principle that teachers prepare a video content about the lesson and share it with students, and before students come to the class, they watch the prepared video lectures and come ready to the lesson. This model aims to enable the students to realize the gains at the level of comprehension of knowledge at home, thanks to the video, and to realize the gains that he/she cannot do alone, such as analysis, synthesis and production, which are higher-level skills, and that the teacher can be more productive, face-to-face in the classroom.

Bloom's taxonomy field	Level	Model	Agent
Create	Higher	F2F in class	Student and teacher
Evaluate	Higher	F2F in class	Student and teacher
Analyse	Higher	F2F in class	Student and teacher
Apply	Lower	Flipped	Student
Understand	Lower	Flipped	Student
Remember	Lower	Flipped	Student

This model assumes that students can achieve the course objectives in the lower order thinking skills and this also could be a preparation for the class. Therefore, teachers prepare a video content to present the subject matter and distribute the video to students so that they watch as many times as they want in their free time at home before coming to class. Consequently, teachers have more opportunities to create activities to do in classroom for higher order thinking skills in Bloom's taxonomy.

Traditional learning	Flipped Learning
Lower order is taught in class	Lower order is taught at home
Learning at school, practice at home alone	Learning at home, practice at school with peers and teacher
Higher order is practiced at home alone	Higher order is practiced in class with peers and teacher
Knowledge at school, Project at home	Knowledge at home, Project at school

In Flipped Learning, we can say that the things that the student will do in the school and home environment are in a way the opposite. Basic information is presented to students in a digital environment, and students reach these environments at home and come to school with ready prior knowledge. At school, they learn the subject in depth by focusing on projects, group work, homework, and problem solving.

### **e-Flipped Learning**

e-Flipped Learning is modified version of traditional flipped learning model. Basically, the e-flipped model has the main pillars of the traditional flipped learning, however, in e-FLIP, some of the problems experienced by learners and teachers are addressed and suggestions are presented to solve these problems.

The teacher prepares a video content in e-FLIP and distributes the video online to learners by using appropriate web tools. Then, the students watch the videos and come to class to do further in-depth learning extension activities. The main differences presented in e-FLIP learning are:

**a. Interaction:** The videos in the traditional flipped learning were non-interactive. With the modern online technologies, it is now possible to create interactive content. Therefore, students do not only watch the video but also interact with the content in the video in a variety of forms – from a simple click in multiple choice items to detailed comments to the video or to the peers who also watch the same video.

**b. Collaboration:** In the traditional flipped learning, the student was at home and did work individually. However, there are various technology tools to enable students to participate in collaborative work at the comfort of their home without even physically coming together with their peers. For instance, in a video content file, a teacher can include a forum discussion so that students can make comments and discuss and work in a collaborative way.

**c. Monitor:** Another important limitation of the traditional flipped classroom was the lack of monitoring opportunities. The teacher could not track of student activity of video content and therefore, did not know whether the student watched and mastered the content provided in the video. With the new e-Flipped version, teachers are provided with tools to keep track of student activity in video content with the help of various web tools. The teacher can now monitor whether student watched the video even before the class and invite student to watch it through an email or chatbox on the platform. Moreover, the teacher can provide more support if student had difficulty in the video content even before the lesson.

### **Stages of e-Flipped learning**

There are three basic stages in the e-FLIP Teaching Model.

#### **The Pre-Lesson**

1. Define objectives: In the stage the teacher is expected to define the lesson objectives, and select the ones to present students in the form of a video.

2. Create content: Based on the e-Flipped objectives selected in stage 1, determine the content of the subject matter and create a video scenario.

3. Digitalize the content: The teacher shoots a video of the scenario created in stage 2 and puts it on online platform of preference. Then, shares the content with learners.

4. Monitor learning: In this stage, the teacher monitors the student activity and engagement on the platform where the video content is presented.

### **The While-Lesson**

5. Create engagement activity: The teacher creates and uses engaging activities to improve learners' higher order thinking skills in the content.

6. Coach students: The teacher gives students guidance and support them in doing extensive learning activities.

7. Design assessment: The teachers assess students.

8. Feedback: Based on the engagement activities and assessment task, the teacher provides feedback to students.

### **The Post-Lesson**

9. Reflection: The teacher creates a reflection activity for learners to do after the class. The reflection activity can be online so that it is interactive and collaborative.

10. Design further learning: The teacher creates further activities for learners to work on after the class so that the student expands their understanding of the topic to other topics and even fields.

11. Design assessment: An assessment task to do after class can be designed and shared online with learners.

12. Monitor: All the activities and tasks presented after the lesson can be monitored on the platform hosting the activities. Monitoring is significant to follow the students and make informed decision about the engagement in learning activities.