



Co-funded by  
the European Union



Up2DigiSchool

---

# Curriculum of the Teacher Training Program “Digital School Ready Educator”



---

## Contents

1.	Introduction of the project Up2DigiSchool	3
2.	Curriculum development “Digital school ready educator”	5
3.	Teacher training program “Digital school ready educator”	6
4.	Training plan for teacher trainers	13
5.	Summary of modules I-VI	16
	Module I “Learning environment MOODLE”	16
	Module II “Educational video content creation”	18
	Module III “Interactive data analysis and online surveys”	20
	Module IV “Project-based learning for teachers”	21
	Module V “Pedagogical scenario”	22
	Module VI “Application of artificial intelligence (AI) in school”	24
6.	Technical and human requirements for the training course	27
7.	Assessment and self-assessment of the participants’ competences	28



## 1. Introduction of the project Up2DigiSchool

The Curriculum of the teacher training program was developed within the framework of the Erasmus+ project “Up2DigiSchool – A viable pedagogical approach for digital school education based on the experience of Up2U” (No.2021-1-PL01-KA220-SCH-000027868).

### THE RELEVANCE OF THE PROJECT

There has been a rapid migration to online teaching and learning in recent years. Technology adoption has been accelerating in formal education. As a result, it has become increasingly necessary for teachers to be better prepared to adapt digital learning resources to the educational context. Up2DigiSchool project is based on the [Digital Competence Framework for Educators](#) (DigCompEdu), which is the European Framework for the Digital Competence of Educators. In this project, the framework is utilized to support the teachers’ digital competences in innovative ways. The Digital Education Action Plan (2021-2027) supports the vision of “high-quality, inclusive and accessible digital education in Europe“. According to the Digital Education Vision for the European Schools System (DEVES), “The European Schools system aims to encourage all teachers and members of staff to further develop their knowledge and skills in the pedagogical area, and in this context, particularly in the field of digital competence“. Nevertheless, more significant efforts must be made in some areas such as teacher training and support for schools’ digital pedagogical practices to facilitate the development and online sharing of educational resources and tools.

**THE AIM OF THE PROJECT** is to improve online teaching and learning using innovative technologies and didactics and to enhance teachers’ competence in relation to technology-based teaching and learning in formal education.

### THE OBJECTIVES OF THE PROJECT ARE:

1. provide teachers with innovative teacher training material to enable them to work within the online context;
2. supply teachers with Moodle-based e-learning environment to provide a set of interesting tools and pedagogical approaches that can be easily adapted to the standardized curriculum of formal education and can make the learning process friendlier for students;
3. encourage teachers to incorporate new technologies into their classrooms and develop professional engagement and a positive attitude toward the implementation of distance learning.



Co-funded by  
the European Union



Up2DigiSchool

---

**TARGET GROUPS:** teachers in secondary and vocational schools; school leaders; other teaching professionals; students from 13 years old.



### PROJECT OUTCOMES

Project results will be developed in such a way that they can be tailored to contribute to the enhancement and innovation of teaching and learning process in formal education. Teachers will be equipped with the necessary competences to fully exploit the potential of Moodle to create quality teaching and learning experiences. Teachers will be supplied with innovative material to effectively improve student performance and engagement in the learning process.

### PROJECT PARTNERS:

- Poznań Supercomputing and Networking Center (Poland)
- Kaunas University of Technology (Lithuania)
- National Technical University of Athens (Greece)
- Universita Degli Studi Di Roma La Sapienza (Italy)
- Ellinogermaniki Agogi Scholi Panagea Savva (Greece)
- Kaunas Region Education Centre (Lithuania)

More information about the partnership, project results and outcomes is available on the project UP2DigiSchool website: <https://up2digischool.eu/>



## 2. Curriculum development “Digital school ready educator”

**The aim of the curriculum** is to define the framework for the preparation of the training program to help teachers improve their digital competences and to effectively use digital technologies in the teaching process. The curriculum is implemented on the basis of a teacher professional development program which could be accredited at local or national level and run in teacher training centers and other non-formal educational organizations.

### **Objectives of the curriculum:**

- introduce the relevance, aim, objectives and content of the training course;
- introduce the training methodology;
- present the self-assessment method and professional competencies;
- present the training plan and the learning outcomes.

The curriculum is based on the need analysis developed by the project partners, which is available on the project website: <https://up2digischool.eu/> The results of the need analysis revealed that teachers and school staff in partner countries lack skills and knowledge on how technology can be used to enhance and innovate the learning process.



### 3. Teacher training program “Digital school ready educator”

#### Relevance and innovation of the program

This program *is necessary* because nowadays it is inevitable that methods of teaching and learning should include E-learning environments that can contribute to the literacy skills of teachers using digital means and advanced technologies, and the ability for students to learn in a stimulating and engaging modern environment. This program *is relevant* to the professional development of teachers, working with students from 13 years old. Teachers will use digital tools to create activities to make the learning process attractive for students and increase the interest of the students in their studies. The program *is innovative* as it aims to develop teachers' digital educational culture to enhance students' engagement and achievement in teaching-learning process.

**The aim of the training program** is to train teachers how to implement different pedagogical scenarios online using the activities and resources available on Moodle, to encourage teachers computational thinking, creative and intelligent use of information technology to actively engage students in learning activities.

#### The objectives are:

1. to make teachers more motivated in order to be able to inspire their students to be more aware of the diversity and opportunities of digital technologies;
2. to help teachers improve their digital skills and teaching methods, learn how to connect new topics, new ideas, and new methods to the existing curricula;
3. to encourage teachers continue networking with other teachers to effectively use, create and share digital resources for teaching and learning.

#### The target groups of the training course are:

- teachers in secondary and vocational schools.

#### The duration of the training program

The duration of the training program – 30 hours. The training program consists of 6 modules:

1. Module I. Learning environment MOODLE (22 hours)
2. Module II. Educational video content creation (8 hours)
3. Module III. Interactive data analysis and online surveys (8 hours)
4. Module IV. Project-based learning for teachers (8 hours)



5. Module V. Pedagogical scenario (4 hours)
6. Module VI. Application of Artificial intelligence (AI) in school (8 hours)

The assessment and self-assessment of participants' knowledge and skills throughout the entire program are conducted continuously. Self-assessment questions are provided in the learning materials of all modules. Instructors consistently evaluate participants' practical tasks, monitor their progress, and, if necessary, offer individual or group consultations. **Certificates of completion.** Participants will only receive a 30-hour certificate of completion if they have completed a 22 hour Module I and one optional 8 hour module in the 30-hour teacher training program. Participants may also choose to complete one or more individual modules that are part of the 30-hour teacher training program. Upon successful completion of one or more individual modules in the teacher training program, participants will be eligible for the certificate of completion of that particular module only. If participants are not able to complete the series of modules in one session, their progress will be saved, and when they come back to finish they will be taken to the last screen they completed. All the completion certificates will be automatically generated.

#### Requirements for learners / participants

Learners must have a teaching work experience and digital proficiency level not lower than the level A2 (according to the [DigComEdu](#)).





**The content of the training program** (topics, type of the performance, duration in hours)

Topics	Format of the performance		Total hours
<b>1. Introduction of the training course</b>			
<b>2. Module I. Learning environment MOODLE</b>	<b>Face-to-face / learning doing 8 hours</b>	<b>by Learning on-line 14 hours</b>	<b>Total 22 hours</b>
1. Introduction to VLE Moodle	1	1	2
<p>1.1. Definition of VLE and Moodle alternatives. VLE Moodle strategy and architecture. Improvements in Moodle (&gt;4)</p> <p>1.2. Competence framework usage in Moodle site</p> <p>1.3. The application of educational scenarios</p> <p>1.4. Administration of the digital learning environment, users (roles and permissions), site and user policies</p> <p>1.5. Overview of VLE MOODLE navigation (Dashboard, Home, My courses)</p> <p>1.6. Management of the main page and participants personal information</p> <p>1.7. <i>Practical activities and self-study: create an account for VLE and change your preferences, add posts to forum or comments.</i></p>			
2. Get started with Moodle	1	2	3
<p>2.1. Overview course and category structure</p> <p>2.2. Create and navigate a course</p> <p>2.3. Course settings and layout</p> <p>2.4. Manage users into course (roles and permissions, enrolment methods, guest access, groups)</p> <p>2.5. <i>Practical activities and self-study: create courses and give learners course access</i></p>			
3. Add content to course	1	3	4
<p>3.1. Display information on the course page</p> <p>3.2. Add the content of different kinds (images, presentations, worksheets, PDFs, embed media, share web links, glossary)</p> <p>3.3. Text editor options: ATTO or TinyMCE</p> <p>3.4. Other resources and block</p> <p>3.5. Track user's progress</p> <p>3.6. <i>Practical activities and self-study: Add content to your Moodle course (create a learning unit with the content of different kinds and monitor other participants' progress; share created content with</i></p>			
4. Add activities to course	2	4	6
<p>4.1. Add and manage the quizzes, assignments</p> <p>4.2. Create activities to involve your learners (workshop, database, etc.)</p> <p>4.3. Building communication and collaboration</p> <p>4.4. Activities for feedback or survey, gamification.</p> <p>4.5. <i>Practical activities and self-study: Add activities to your Moodle course (create a quiz, assessment and other)</i></p>			
5. Course Management	2	3	5
<p>5.1. Managing course participants (role, group, grouping)</p> <p>5.2. Designing learning activities and managing them according to different scenarios (escape room, flipped classroom, etc.)</p> <p>5.3. Restrict access to activities</p>			



5.4. Activity report and gradebook			
5.5. Creating interactive content (Lesson, H5P)			
5.6 Practical activities and self-study: Add course participant to group and create grouping activities, add interactive content; changes course by selected teaching scenario			
6. More advanced functions of Moodle	1	1	2
6.1. Customize course and advanced functions			
6.2. Gamification			
6.3. Updating online course			
6.4. Practical activities and self-study: Add gamification activities, create course backup.			
6.5. Module evaluation and experience sharing: round-up of acquired competencies, feedback, and discussion			
<b>3. Module II. Educational video content creation</b>	<b>Face-to-face / learning by doing 3,5 hours</b>	<b>Learning on-line 4,5 hours</b>	<b>Total 8 hours</b>
1. Introduction to Educational Video Content Creation and Planning a video lesson	0,5	0,5	1
1.1. Types of educational videos			
1.2. The most important aspects in audio and video program production			
1.3. How to prepare for video and audio recording			
1.4. The most popular tools for audio/video recording and to compare their main features			
1.5. Other tools for educational video content creation			
1.6. Planning a video lesson			
2. Making and recording a video lesson	0,5	1,5	2
2.1. Cameras, microphones, lighting, and other essential equipment			
2.2. Introduction to video recording software (e.g. Loom, ZOOM, MS Teams, MS PowerPoint)			
2.3. Practical exercises in shooting and recording			
3. Editing a video lesson	1	1	2
3.1. Introduction to video editing software (e.g., ClipCamp, Loom, Youtube and free options like DaVinci Resolve, OpenShot).			
3.2. Demonstration of the basic editing techniques			
3.3. Exporting and optimizing for various platforms			
3.4. Practical exercises in shooting and editing			
4. Interactive videos and gamification	1	1	2
4.1. Introduction to interactive video platforms (e.g., H5P)			
4.2. Adding quizzes, branching scenarios, and gamification elements			
5. Publishing a digital content and video lesson	0,5	0,5	1
5.1. Demonstration of the easiest methods for publishing of the video (e.g. Youtube)			
5.2. Individual tasks to create a video lesson and to share with peers for feedback			
<b>4. Module III. Interactive data analysis and online surveys</b>	<b>Face-to-face / learning by doing 2,5 hours</b>	<b>Learning on-line 5,5 hours</b>	<b>Total 8 hours</b>
1. Introduction to Data Analysis	-	0,5	0,5
1.1. Fundamentals of data analysis			
1.2. The role of data analysis in education and society of technology			
1.3. Examples of data analysis applications			
1.4. Types of data: qualitative and quantitative data			



1.5. Overview of data analysis tools: Jupyter Notebook, Pandas, NumPy			
2. Python Basics for Data Analytics	0,5	1	1,5
2.1. Introduction to Python 2.2. Data structures in Python 2.3. Logical and conditional operators 2.4. Loops and iterations			
3. Working with Jupyter Notebooks	1	2	3
3.1. Installation and configuration of the Jupyter Notebook environment 3.2. Create, save and open notebooks 3.3. Executing code and adding text 3.4. Using Markdown in Notebooks 3.5. Creating dynamic charts and filters 3.6. Visualisation of survey results in an interactive way			
4. Data Preparation and Processing	0,5	0,5	1
4.1. Loading data from various sources 4.2. Data cleaning and formatting 4.3. Exploratory Data Analysis (EDA)			
5. Data Visualization	0,5	0,5	1
5.1. The role of visualisation in data analysis 5.2. Charts of basic data types 5.3. Create interactive charts 5.4. Matplotlib library for plotting 5.5. Create interactive charts with Plotly			
6. Online Survey Creation and Analysis	-	1	1
6.1. Designing an online survey 6.2. Choosing the right tool for creating surveys (e.g. LimeSurvey) 6.3. Survey results analysis: interpretation and conclusions			
<b>5. Module IV. Project-based learning for teachers</b>	<b>Face-to-face / learning by doing 3,5 hours</b>	<b>Learning on-line 4,5 hours</b>	<b>Total 8 hours</b>
1. Introduction to PBL	-	0,5	0,5
1.1. Definition of PBL 1.2. Benefits of PBL 1.3. Core Elements of PBL			
2. Designing PBL projects	0,25	1,25	1,5
2.1. Goal setting 2.2. Choosing a topic 2.3. Creating Guiding Questions 2.4. Lesson Sequence Planning			
3. Implementation of PBL projects	0,25	1,25	1,5
3.1. Team building 3.2. Research and analysis 3.3. Problem solving 3.4. Communication			
4. Project management tools and methods	1	1	2
4.1. Project Management Fundamentals 4.2. Project management tools 4.3. Assigning Tasks and Tracking Progress			
5. Evaluation in the PBL project	-	0,5	0,5

*This project has been funded, with the support from European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use, which may be made of the information contained therein.*



5.1. Assessment Criteria			
5.2. Student Portfolio			
5.3. Self-assessment and peer-assessment			
6. Case studies and practical application	1	1	2
6.1. PBL Project Analysis			
6.2. Practical exercises: Creating simple PBL projects related to the subjects taught by the course participants			
<b>6. Module V. Pedagogical scenario</b>	<b>Face-to-face / learning by doing 1,5 hours</b>	<b>Learning on-line 2,5 hours</b>	<b>Total 4 hours</b>
1. The Importance of Learning Scenarios	0,25	0,5	0,75
1.1. Introduction to the need of learning scenarios			
1.2. Benefits of creating learning scenarios			
1.3. <i>Sharing experiences (practical task)</i>			
2. The Value of Sharing Learning Scenarios	0,25	0,5	0,75
2.1. Why share learning scenarios? introduction to collaborative teaching			
2.2. Advantages of a shared repository			
2.3. <i>Group Activity – Brainstorming (practical task)</i>			
3. Using a Learning Scenario Template	0,75	0,5	1,25
3.1. Learning Scenario Template Creation			
3.2. Creating a mock learning scenario			
4. Introduction to the ChatGPT-based Prompt for Creating Learning Scenarios	0,25	1	1,25
4.1. How the ChatGPT prompt works			
4.2. Creating scenarios with ChatGPT			
<b>7. Module VI. Application of Artificial intelligence (AI) in school</b>	<b>Face-to-face / learning by doing 2,5 hours</b>	<b>Learning on-line 5,5 hours</b>	<b>Total 8 hours</b>
1. Introduction to Artificial Intelligence in Education	-	1	1
1.1. Definition of artificial intelligence: historical context and development of AI, types			
1.2. Current trends, opportunities and challenges in AI for education			
1.3. Ethical considerations in AI-powered education			
1.4. <i>Practical activities and self-study: research and present an overview of AI technologies currently used in education. Discuss the potential benefits and ethical considerations of these technologies</i>			
2. AI-Powered Teaching and Learning	0,5	1,5	2
2.1. Overview of AI-powered classroom management systems			
2.2. AI-driven content creation and curation			
2.3. Personalized learning through AI adaptive platforms			
2.4. Gamification and AI in education			
2.5. Case studies and best practices			
2.6. <i>Practical activities and self-study: create a sample content with selected AI systems. Discuss and share case studies or best practices</i>			
3. AI for Student Assessment and Feedback	0,5	1,5	2
3.1. Automated grading and assessment			
3.2. AI-driven feedback generation			
3.3. Enhancing assessment fairness and transparency			
3.4. Practical examples and tools			



3.5. <i>Practical activities and self-study: create a sample assessment, quiz or feedback using one of these tools. Discuss the advantages and challenges of using AI for assessments</i>			
4. Student Progress Tracking	0,5	0,5	1
4.1. Using AI to track student progress			
4.2. Analyzing data for insights			
4.3. <i>Practical activities and self-study: discuss potential challenges and solutions</i>			
5. Implementing AI in the Classroom	1	1	2
5.1. Data Privacy and Security (Compliance with data protection regulations (e.g. GDPR); Ethical considerations in AI-powered education			
5.2. Integrating AI into lesson planning			
5.3. Selecting and using AI tools effectively			
5.4. <i>Practical activities and self-study: choose a specific lesson or topic from your curriculum. Create a lesson plan for how you could integrate AI tools or resources to enhance the lesson. Share your ideas and plans with peers for feedback.</i>			
<b>8. Reflection / Self-assessment</b>			
<b>9. Certification</b>			
<b>Total</b>			<b>30</b>

### Teaching and Learning Methodology

The pedagogical strategy of this training course is based on the set of tools that support an inquiry - and discovery-based approach to online learning. The foundation of the e-training course focuses on teaching approach which emphasizes the construction of knowledge through active and interactive learning. The training course offers several teaching possibilities: resources and activities, which facilitate interaction between educator and learners, the learners themselves, and the learners with the resources and activities. Furthermore, in-class activities are combined with individual task study and individual task performance.



## 4. Training plan for teacher trainers

This training plan meets the standards of the European Framework for the Digital Competence of Educators (DigCompEdu). The training plan is developed as a framework to organize the training program for teachers. This plan is based on the content of the training program and gives a step-by-step overview of the training process. The total duration of the training course is 30 hours, comprising 25.5 contact hours (face-to-face meetings and learning by doing) and 36.5 hours for self-study of the material via MOODLE platform.

MODULE I LEARNING ENVIRONMENT MOODLE			
Training session	Type	Duration in hours	Content
The first training session	e-learning via platform	2	<ul style="list-style-type: none"> <li>● Introduction of the teacher training program and Module I (aims, competences, assessment strategies), overview of Moodle (how navigate, create account)</li> <li>● Self-study of topics 1</li> <li>● Self-practical activities</li> <li>● Self-questions of acquired knowledge and skills</li> </ul>
The second training session	Face-to-face Learning by doing e-learning via platform	3	<ul style="list-style-type: none"> <li>● Introduction and demonstration of the teacher how get started with Moodle (to create and edit course by selected educational context)</li> <li>● Self-study of topic 2</li> <li>● Self-practical task and activities after training session</li> <li>● Self-questions of acquired knowledge and skills.</li> </ul> <p><i>Trainer's role: demonstration, explanation, guidance</i></p>
The third training session	Face-to-face Learning by doing e-learning via platform	4	<ul style="list-style-type: none"> <li>● Introduction and demonstration of the teacher how to add digital content to the course.</li> <li>● Self-study of topic 3</li> <li>● Self-practical task and activities after training session</li> <li>● Self-questions of acquired knowledge and skills.</li> </ul> <p><i>Trainer's role: demonstration, explanation, guidance</i></p>
The fourth training session	Face-to-face Learning by doing e-learning via platform	3	<ul style="list-style-type: none"> <li>● Introduction and demonstration of the teacher how to add simple activities to the course and to create quizzes and assessments.</li> <li>● Self-study of topic 4.</li> <li>● Self-practical tasks and activities after a training session.</li> <li>● Self-questions of acquired knowledge and skills.</li> </ul> <p><i>Trainer's role: demonstration, explanation, guidance</i></p>
The fifth training session	Face-to-face Learning by doing e-learning via platform	3	<ul style="list-style-type: none"> <li>● Introduction and demonstration of the teacher how to add activities for communication and collaboration to the course and to create quizzes and assessments.</li> <li>● Self-study of topic 4.</li> <li>● Self-practical tasks and activities after a training session.</li> <li>● Self-questions of acquired knowledge and skills.</li> </ul> <p><i>Trainer's role: demonstration, explanation, guidance</i></p>



The sixth training session	Face-to-face Learning by doing e-learning via platform	2,5	<ul style="list-style-type: none"> <li>● Introduction and demonstration of the teacher how to organize group activities and to change course design for different scenarios.</li> <li>● Self-study of topic 5.</li> <li>● Self-practical tasks and activities after a training session.</li> <li>● Self-questions of acquired knowledge and skills.</li> </ul> <p><i>Trainer's role: demonstration, explanation, guidance</i></p>
The seventh training session	Face-to-face Learning by doing e-learning via platform	2,5	<ul style="list-style-type: none"> <li>● Introduction and demonstration of the teacher how to add interactive content and to create activities with restricted access.</li> <li>● Self-study of topic 5.</li> <li>● Self-practical tasks and activities after a training session.</li> <li>● Self-questions of acquired knowledge and skills.</li> </ul> <p><i>Trainer's role: demonstration, explanation, guidance</i></p>
The eighth training session	Face-to-face Learning by doing e-learning via platform	2	<ul style="list-style-type: none"> <li>● Introduction to the advanced function of Moodle and demonstration of the teacher how to add gamification activities.</li> <li>● Self-study of topic 6.</li> <li>● Self-practical tasks and activities after a training session.</li> <li>● Self-questions of acquired knowledge and skills.</li> </ul> <p><i>Trainer's role: demonstration, explanation, guidance</i></p>
		<b>Total: 22 hours</b>	
<b>MODULE II</b>			
<b>EDUCATIONAL VIDEO CONTENT CREATION</b>			
Training session	Type	Duration in hours	Content
The first training session	Face-to-face e-learning via platform	3	<ul style="list-style-type: none"> <li>● Self-study of topics 1-2 (prior live session)</li> <li>● Introduction of the teacher training program and Module II (aims, competences, assessment strategies), overview types of educational videos. Introduce basic principles on how to prepare for video and audio recording, and make recording.</li> <li>● Demonstration to video recording software</li> <li>● <i>Self-task to prepare for lesson recording, create a video lesson plan and make a record.</i></li> </ul> <p><i>Trainer's role: demonstration, explanation, guidance</i></p>
The second training session	Face-to-face Learning by doing e-learning via platform	4	<ul style="list-style-type: none"> <li>● Self-study of topics 3-5 (prior live session)</li> <li>● Introduce with editing tools alternatives</li> <li>● Introduce with interactive tools to add interactive elements as question, additional text, link and other</li> <li>● <i>Self-task to edit video recording and create a video lesson with interactive elements</i></li> </ul> <p><i>Trainer's role: demonstration, explanation, guidance</i></p>
The third training session	Face-to-face Learning by doing e-learning via platform	1	<ul style="list-style-type: none"> <li>● Introduction and demonstration of the teacher how to publish a video lesson</li> <li>● <i>Self-task to public video lesson and to share with peers for feedback.</i></li> <li>● <i>Self-questions of acquired knowledge and skills.</i></li> </ul>



			<i>Trainer's role: demonstration, explanation, guidance</i>
		<b>Total: 8 hours</b>	
<b>MODULE III INTERACTIVE DATA ANALYSIS AND ONLINE SURVEYS</b>			
Training session	Type	Duration in hours	Content
The first training session	E-learning via platform	5	<ul style="list-style-type: none"> <li>Self-study of topics 1-3 (prior live session)</li> <li>Demonstration of tools from topic 3</li> </ul> <i>Trainer's role: demonstration, explanation, guidance</i>
The second training session	E-learning via platform Learning by doing	3	<ul style="list-style-type: none"> <li>Self-study of topics 4-6 (prior live session)</li> <li>Review of participants' practical exercises</li> </ul> <i>Trainer's role: demonstration, explanation, guidance</i>
		<b>Total: 8 hours</b>	
<b>MODULE IV PROJECT-BASED LEARNING FOR TEACHERS</b>			
Training session	Type	Duration in hours	Content
The first training session	E-learning via platform	5,5	<ul style="list-style-type: none"> <li>Self-study of topics 1-4 (prior live session)</li> <li>Demonstration of tools from topic 4</li> </ul> <i>Trainer's role: demonstration, explanation, guidance</i>
The second training session	E-learning via platform Learning by doing	2,5	<ul style="list-style-type: none"> <li>Self-study of topics 5-6 (prior live session)</li> <li>Discussion on case studies</li> <li>Review of participants' practical exercises</li> </ul> <i>Trainer's role: demonstration, explanation, guidance</i>
		<b>Total: 8 hours</b>	
<b>MODULE V PEDAGOGICAL SCENARIO</b>			
Training session	Type	Duration in hours	Content
The first training session	E-learning via platform	2	<ul style="list-style-type: none"> <li>Self-study of topics 1-3 (prior live session)</li> <li>Demonstration of topics 1-3</li> </ul> <i>Trainer's role: explanation, guidance</i>
The second training session	E-learning via platform Learning by doing	2	<ul style="list-style-type: none"> <li>Self-study of topics 4 (prior live session)</li> <li>Review of participants' practical exercises</li> </ul> <i>Trainer's role: demonstration, explanation, guidance</i>
		<b>Total: 4 hours</b>	
<b>MODULE VI APPLICATION OF ARTIFICIAL INTELLIGENCE (AI) IN SCHOOL</b>			
Training session	Type	Duration in hours	Content
The first training session	e-learning via platform Face-to-face Learning by doing	5	<ul style="list-style-type: none"> <li>Self-study of topics 1-3 (prior live session)</li> <li>Demonstration of AI tools from topic 2 and topic 3.</li> <li><i>Self-task to research and present an overview of AI technologies currently used in education and discuss in the forum of the potential benefits. Self-practical task to</i></li> </ul>





			<p><i>create a sample content for learning content, assessment or quiz with selected AI systems. Discuss and share case studies or best practices</i></p> <p><i>Trainer’s role: demonstration, explanation, guidance</i></p>
The second training session	Face-to-face Learning by doing e-learning via platform	3	<ul style="list-style-type: none"> <li>● Self-study of topics 4-5 (prior live session)</li> <li>● Introduce with content from topics 4-5</li> <li>● Review of participants’ practical exercises</li> <li>● <i>Self-task to create a lesson plan for how you could integrate AI tools or resources to enhance the lesson and share the plans with peers for feedback. discuss potential challenges and solutions</i></li> </ul> <p><i>Trainer’s role: demonstration, explanation, guidance</i></p>
		<b>Total: 8 hours</b>	

## 5. Summary of modules I-VI

### Module I “Learning environment MOODLE“

#### Abstract (relevance and innovation of the module)

The module will provide teachers with all the basic knowledge and skills necessary to use virtual learning environment Moodle to create and administer their courses and lessons. The participants will learn how to have Moodle site up, how to navigate within the Moodle interface, how to manage the roster of students enrolled in a course, and how to upload media or create interactive content and different kinds of activities, how to create group activities and assessments for classes.

**Aim of Module I** is to introduce teachers to the virtual learning environment Moodle and to provide them skills and knowledge on how to organize and manage a learning process in a virtual learning environment to effectively teach for class.

The module will help the teachers to:

- adapt the flexibility of Moodle to their educational context,
- create courses in Moodle,
- manage Moodle users and group,
- add digital and interactive content to their course,
- create communicate and collaborative activities to involve their learners,
- add assignment, quiz, feedback and other activities,
- updating course by students’ progress and course reports.



### Content of Module I:

- Introduction to VLE Moodle
- Get started with Moodle
- Add content to course
- Add activities to course
- Course Management
- New and more advanced functions of Moodle

### Teaching / learning methods

- Lectures in the form of demonstration how to create and manage different Moodle tools.
- Self-practical task to get skills used different Moodle tools for content creation and course management, and create own course with content of resources and activities.
- Share experience and creation courses (or other material) with another participant in the Moodle forum.
- Self-evaluation, module-evaluation: round-up acquired competencies, feedback, and discussion.
- Peer review and evaluation created Moodle courses and other resources with Moodle Tools.
- Self-reflection questions or quizzes after each topic to evaluate self knowledge.

### Assessment of acquired skills and knowledge of the participant

Participants will be assessed on the basis of questions and completed assessments and practical tasks, evaluate and share experiences with other participants.

### Acquired (or developed) competences

- Understanding and skills to use VLE MOODLE.
- Knowledge and skills create and manage Moodle courses.
- Collaboration and interactive activities that engage students in the learning process.



---

## Module II “Educational video content creation”

### Abstract (relevance and innovation of the module)

The module will provide teachers with all the basic knowledge and skills necessary to create educational video content. Module II is structured around creating engaging video lessons and other digital content, incorporating interactive elements within video lessons, filming, recording, editing and publishing video content. Module II provides an overview of the principles of effective learning and teamwork.

**Aim of Module II** is to introduce teachers to different tools for creation of educational video content.

The module will help the teachers:

- to introduce the most important aspects in audio and video program production, and how to prepare for video and audio recording,
- to identify most popular tools for audio/video recording and to compare their main features,
- to identify the most popular tools for audio/video editing and provide recommendations in choosing the best fit for purpose,
- to introduce tools for creation of interactive video and to demonstrate how add interactive and gamification elements for video,
- to demonstrate the easiest methods for publishing of the video.

### Content of Module II

- Introduction to educational video content creation and planning a video lesson
- Making and recording a video lesson
- Editing a video lesson
- Interactive videos and gamification
- Publishing a digital content and video lesson

Module II seeks to provide an orientation to educational video content creation. Educational video content creation is directed at the principles of effective learning and pedagogical integration of technology. The module introduces and demonstrates how to prepare for video and audio recording (tools, light, program, sound, image) and to identify how to choose the best tools fit for purpose for audio/video recording, how to update a video recorder, to add interactive and gamification elements for video, and how to publish content. Educators develop their digital competence in video lesson creation supplemented by individual tasks which are intended to create a video lesson.

### Teaching / learning methods



- 
- Lectures in the form of demonstration how to create digital content, make a recording with different tools.
  - Self-practical task to get skills using different digital tools for video lesson creation.
  - Peer review and evaluation each created a Video lesson, sharing their experience.
  - Self-reflection questions to evaluate self-knowledge.

#### Assessment of acquired skills and knowledge of the participant

Participants will be assessed on the basis of self-question and activities, where they evaluate their own progress and identify areas where they have improved or need further development. Practical tasks and activities (e.g., creating video lesson plan and simple video) in which participants demonstrate their overall knowledge, skills, and practical application to used video recording tools. Participants will be completed final task to create a Video lesson, evaluate and share experiences with other participants.

#### Acquired (or developed) competences

- Understanding and skills to use educational video content.
- Knowledge and skills make and edit video, publish the video content.
- Learn how to make and reuse a video lesson as interactive learning content.



---

## Module III “Interactive data analysis and online surveys”

### Abstract (relevance and innovation of the module)

In this module, participants will gain an in-depth understanding of interactive data analysis and online surveys. They will gain knowledge about the fundamentals of data analysis, learn the basics of Python programming language and execution of codes in Jupyter Notebooks. The participants will also learn about the topics of data processing and visualisation, as well as the design of an online survey.

**Aim of Module III** is to empower educators with the knowledge and skills necessary to harness the potential of interactive data analysis and online surveys in their teaching contexts. Participants will learn how to utilize data-driven insights to tailor their teaching strategies and engage in evidence-based decision-making.

### Content of Module III

- Introduction to Data-Driven Education: understanding the role of data analysis in educational improvement, examples of data analysis applications, types of data, overview of data analysis tools: Jupyter Notebook, Pandas, NumPy.
- Using Interactive Tools for Educational Insights - Jupyter Notebook: hands-on experience with interactive data visualization platforms.
- Data Preparation and Processing - cleaning and preparing data for analysis, identifying trends and patterns, visualizations.
- Designing Effective Online Surveys for Education: crafting surveys to gather student feedback, analyzing survey responses to inform instructional adjustments.
- Applying Data Insights to Instruction: tailoring teaching strategies based on data-driven insights, monitoring student engagement and adjusting interventions.

### Teaching / learning methods

- Lectures in the form of multimedia presentations that discuss concepts related to interactive data analysis and online surveys in education.
- Analysis of case studies that illustrate the usefulness of interactive data analysis in educational practice.
- Practical exercises where participants analyze real datasets, create visualizations, and design surveys.

### Assessment of acquired skills and knowledge of the participant



Participants will be assessed on the basis of a quiz and participation in practical online exercises. Assessment will be based on understanding the concepts related to interactive data analysis and online surveys in education, ability to design, deploy, and analyze online surveys effectively, and being able to interpret and communicate insights from datasets.

#### Acquired (or developed) competences

- Proficiency in using interactive data analysis and online survey tools.
- Ability to design, deploy, and analyze online surveys effectively.
- Skills in interpreting and communicating insights from datasets.

### Module IV “Project-based learning for teachers”

#### Abstract (relevance and innovation of the module)

In this module, participants will gain an in-depth understanding of Project-Based Learning (PBL) as an advanced teaching method. They will gain knowledge about the benefits of PBL and learn about the key elements that form the basis of this methodology. This module aims to provide participants with a solid foundation in PBL and provide motivation to further explore this method in a teaching context.

**Aim of Module IV** is to introduce teachers to Project-Based Learning, PBL, Project Method and to provide them with the tools, skills and project management methods necessary to effectively design, implement and evaluate projects.

#### Content of Module IV:

- Definition of PBL: Discuss the essence of PBL as a teaching method that emphasizes the active participation of students in projects.
- Benefits of PBL: Explaining the main benefits of PBL, such as developing critical thinking, problem solving and collaboration skills.
- Core PBL Elements: Introduce the key components of PBL, such as guiding questions, real challenges, and reflecting on results.

#### Teaching / learning methods

- Lectures in the form of multimedia presentations that discuss concepts related to PBL.
- Analysis of case studies that illustrate the effectiveness of PBL in educational practice.
- Practical exercises where participants create simple guiding questions for potential PBL projects.

#### Assessment of acquired skills and knowledge of the participant

---

*This project has been funded, with the support from European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use, which may be made of the information contained therein.*



---

Participants will be assessed on the basis of a quiz and participation in practical online exercises. Assessment will be based on understanding the concept of PBL, identifying the benefits of the method, and being able to create inspiring guiding questions.

#### Acquired (or developed) competences

- Understanding the concepts and benefits of Project-Based Learning.
- Ability to analyze key elements in PBL.
- Create guiding questions that engage students in the learning process.
- Recognize the potential benefits and challenges of CLL.

### Module V “Pedagogical scenarios”

#### Abstract (relevance and innovation of the module)

This module is crafted to usher in a new era of educational methodologies by providing an in-depth exploration of Learning Scenarios. It underscores the pivotal importance these scenarios hold in the modern educational landscape, enriching the teaching and learning process through a blend of practical application and conceptual clarity. Participants will be introduced to pioneering tools like ChatGPT, enabling them to craft dynamic and engaging learning environments. This module goes beyond traditional teaching methods, incorporating multimedia lectures, case studies, and practical exercises for an immersive educational experience. It aims to foster a community of educators proficient in designing, sharing, and utilising Learning Scenarios, thus promoting a culture of collaboration and continuous improvement in educational standards. The integration of ChatGPT for scenario creation represents a leap forward in educational technology, equipping participants with cutting-edge skills in digital pedagogy. Assessments and hands-on activities ensure that participants not only grasp the theoretical underpinnings but can also implement these innovative practices effectively.

**Aim of Module V** is to equip participants with a comprehensive understanding of Learning Scenarios, emphasizing their significance, functionality, and practical application in educational settings, while also introducing them to innovative tools like ChatGPT for scenario creation.

#### Content of Module V:

The Importance of Learning Scenarios:

- Why do we need learning scenarios?
- Benefits of creating learning scenarios

The Value of Sharing Learning Scenarios

- Why share learning scenarios?
- Advantages of a shared repository



#### Using a Learning Scenario Template

- Creating a mock learning scenario based on a template
- Finding Ready Learning Scenarios

#### Introduction to the ChatGPT-based Prompt for Creating Learning Scenarios

- How the ChatGPT prompt works
- Showcasing the interaction with ChatGPT and how it aids in scenario creation
- Creating scenarios with ChatGPT

#### Teaching / learning methods

- Lectures in the form of multimedia presentations that discuss concepts related to the creation of learning scenarios.
- Presentation of case studies that illustrate the usefulness of learning scenarios in educational practice.
- Practical exercises where participants will create their learning scenarios and will share it with other in an online repository.

#### Assessment of acquired skills and knowledge of the participant

Participants will be assessed on the basis of a quiz and their engagement in hands-on activities involving the creation and application of learning scenarios. Assessment will focus on understanding the principles and benefits of learning scenarios in modern education, proficiency in using the Learning Scenarios Repository and the Learning Scenario Template, and the ability to effectively integrate and utilize tools like ChatGPT for dynamic scenario creation. Additionally, emphasis will be placed on their capability to share, collaborate, and contribute to the educational community through these scenarios.

#### Acquired (or developed) competences

- Proficiency in understanding and applying the principles of learning scenarios in modern education.
- Skills in creating dynamic and responsive learning scenarios using tools like ChatGPT.
- Competence in collaborating, sharing, and contributing to the educational community through well-designed learning scenarios.





---

## Module VI “Application of artificial intelligence (AI) in school”

### Abstract (relevance and innovation of the module)

The module will provide teachers with the basic knowledge and skills about the artificial Intelligence (AI) in education. In an era marked by rapid technological advancements, the integration of AI into the educational landscape has become a transformative force. This 8-hour module is designed to educators with the knowledge and skills needed to harness the power of AI in enhancing teaching and learning experiences within schools. Participants will gain insights into practical AI applications that can enhance teaching, improve student outcomes, and streamline administrative tasks in a school setting.

**Aim of Module VI** is to equip educators with the knowledge, skills, confidence and practical insights required to effectively harness AI in the educational context.

Through this program, participants will:

- to introduce the fundamental understanding of Artificial Intelligence (AI), its history, significance, and ethical considerations, providing them with the knowledge necessary to navigate the AI landscape in education,
- to demonstrate how to use AI tools to personalize learning experiences, create adaptive learning environments, and integrate AI-powered content and gamification into their teaching practices,
- to provide individualized support to students with disabilities through AI-driven assistive technologies, speech and language therapy tools, and inclusive education strategies,
- to introduce how to protect student data, comply with data protection regulations, and address ethical considerations when implementing AI technologies in education,
- to develop practical skills in integrating AI into their teaching, lesson planning, and student progress tracking, enabling them to create more engaging and effective learning environments.

### Content of Module VI:

- Introduction to Artificial Intelligence in Education
- AI-Powered Teaching and Learning
- AI for Student Assessment and Feedback
- Student Progress Tracking
- Implementing AI in the Classroom

### Teaching / learning methods



- 
- Lectures and presentations to provide participants with a foundational understanding of AI concepts and their applications in education.
  - Group discussions encourage participants to engage in critical thinking and share their perspectives. It provides a platform for collaborative learning, idea exchange, and the exploration of AI's implications in education.
  - Online Resources: Participants may have access to online resources, including readings, videos, and AI tools, to supplement their learning and explore specific topics in greater depth.
  - Peer Learning (peer review): Encouraging peer-to-peer learning and knowledge sharing enables participants to learn from each other's experiences and insights.
  - Q&A: Question-and-answer discussion forums provide opportunities for participants to seek clarification, discuss doubts, and engage in further exploration of specific topics.
  - Practical task: The program may include a practical project component where participants apply their AI knowledge to create an AI-enhanced teaching plan or propose improvements to school processes using AI.
  - Interactive Quizzes and self-questions. Quizzes and self-questions are used to gauge participants' understanding of the material covered.

### Assessment of acquired skills and knowledge of the participant

Participants will be assessed on the basis of self-quizzes and reflection activities, where they evaluate their own progress and identify areas where they have improved or need further development. Practical tasks and activities (e.g., creating AI-enhanced lesson plans and proposing AI-driven improvements to school processes) in which participants demonstrate their overall knowledge, skills, and practical application of AI in education. Are used peer assessments where participants evaluate each other's work, such as lesson plans and AI-related projects. Peer feedback provides valuable insights into the participants' ability to critically evaluate AI implementations.

### Acquired (or developed) competences

- Acquire a basic understanding of what AI is and how it works.
- Understand the ethical considerations surrounding AI use in education.
- Learn to use AI tools for automated grading and assessment and understand how to create assessments that utilize AI for better feedback.
- Gain skills in analyzing data generated by AI assessment tools and extract insights from assessment data to inform instruction.



- 
- Learn how to protect student data and ensure compliance with data protection regulations understand the ethical implications of data used
  - Develop the ability to integrate AI tools into lesson planning and teaching.
  - Apply AI technologies effectively to enhance classroom experiences.



## 6. Technical and human requirements for the training course

The organizations which are going to organize the training course according to the prepared Curriculum should ensure a convenient learning environment, technical equipment and tools, necessary for providing the teaching and learning process based on the blended learning approach within **the following facilities**:

- classroom with a multimedia projector / smart board and computers for face-to-face meetings;
- access to the personal computers with the internet connection to the e-learning platform, WiFi;
- access to e-learning platform MOODLE for self-study of learning material;
- other organizational tools for face-to-face meetings.

**The teacher trainers** must be qualified, knowledgeable in didactics, information technologies, also, have a basic pedagogical and psychological background, and possess appropriate personal skills, attitudes and values to encourage active learning with reflective, open and tolerant communication. The trainers have to formulate clear tasks for self-learning on the e-platform and indicate the requirements for feedback and reflection.



## 7. Assessment and self-assessment of the participants' competences

The assessment and self-assessment of participants' knowledge and skills throughout the entire program are conducted continuously. Self-assessment questions are provided in the learning materials of all modules. Instructors consistently evaluate participants' practical tasks, monitor their progress, check if certain predefined criteria or conditions are met by participants and, if necessary, offer individual or group consultations.

### **Certificates of completion**

Participants will only receive a 30-hour certificate of completion if they have completed 22 hour Module I and one optional 8 hour module in the teacher training program. Participants may also choose to complete one or more individual modules that are part of the 30-hour teacher training program. Upon successful completion of one or more individual modules in the teacher training program, participants will be eligible for the certificate of completion of that particular module only. All the completion certificates will be automatically generated in Moodle platform <https://learn.up2digischool.eu/>. Automated certificates will only be issued instantly upon completion of all required tasks in any individual module in the teacher training program. Yet a 30-hour certificate will not be issued automatically because the certification process may involve a manual review or human judgement to ensure the accuracy of certification. If participants are not able to complete the series of modules in one session, their progress will be saved, and when they come back to finish they will be taken to the last screen they completed.