

Palma de Mallorca (Spain)
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EDULEARN₂₅

CONNECTING TECHNOLOGY WITH EDUCATION

FLEXIBLE DESIGN TOOLS AND TRAINING FOR TEACHERS
RESULTS FROM A EUROPEAN PROJECT

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FLED
LEARNING DESIGN FOR
FLEXIBLE EDUCATION



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the European Union



UNIVERSITÀ
DI TRENTO
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Psicologia e Scienze Cognitive

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Why flexibility and flipped learning matter

Flexibility in education refers to the possibility of adapting pedagogical models and strategies to different teaching scenarios and situations, as well as to different student profiles.



LEARNING DESIGN FOR
FLEXIBLE EDUCATION

Flipped Learning is a student-centred, flexible and inclusive pedagogical approach in which the traditional sequence of teaching is reversed: students first engage with new content before class and then use class time for active, collaborative, and problem-based learning activities.

Why flexibility and flipped learning matter

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- Teaching needs are rapidly evolving
- Students demand more autonomy, accessibility, and interaction
- Traditional lectures struggle to meet diverse needs
- Flipped Learning (FL) offers active, student-centred learning
- Flexibility is essential: time, pace, space, and modality

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Designing for flipped and flexible learning

Consortium

ES Autonomous University of
Barcelona (UAB, Spain)
ES Pompeu Fabra University of
Barcelona (UPF, Spain)
PT Universidade Aberta (UAb,
Portugal)
BG Sofia University (SU, Bulgaria)
NO University of Stavanger (UiS,
Norway)
IT University of Trento (TU, Italy)

Project overview

- Erasmus+ project: FLeD – Learning Design for Flexible Education
- Goal: Support teachers in designing flexible, inclusive and flipped with the scaffold of a platform-the FLeDTool
- Diverse contexts: Designed for online, blended, and face-to-face contexts
- Core outcome: The FLeD Tool, a digital instructional design platform

FLeD Tool: a digital learning design platform

What is it and how it works?

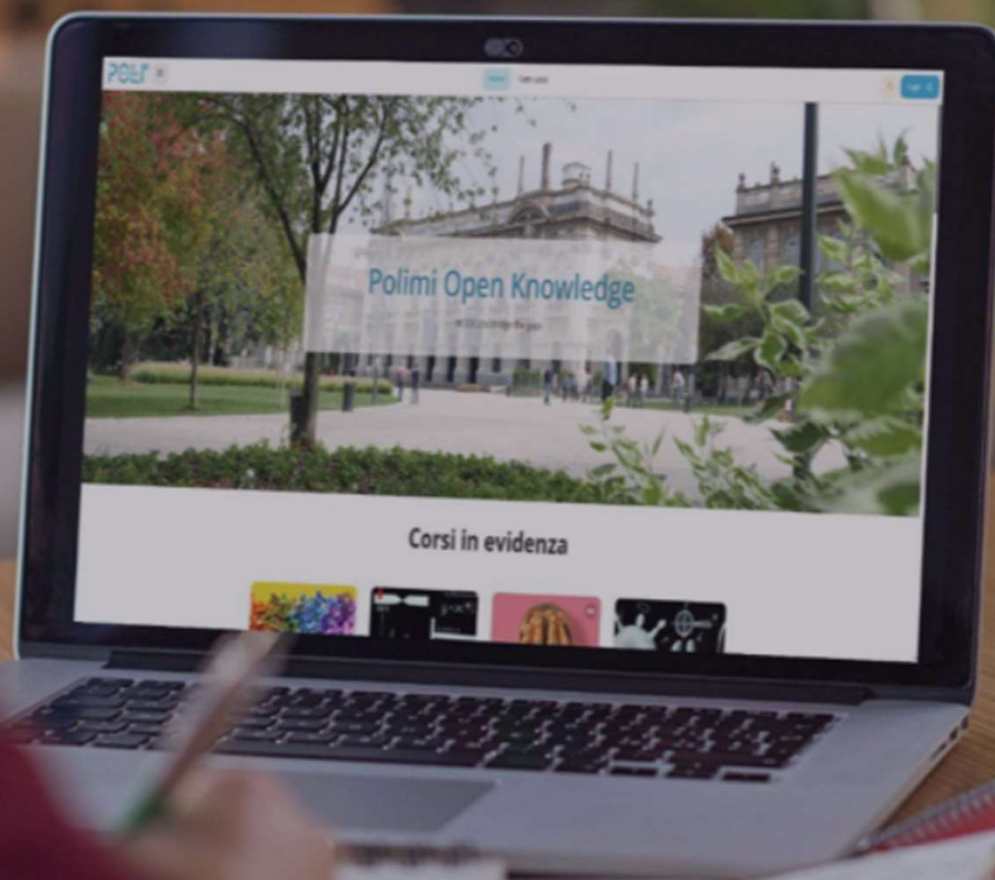
- A digital platform supporting flipped learning design
- Helps structure learning scenarios for different modalities
- Embedded scaffolding and guidance
- Promotes accessibility and inclusivity
- Linked directly with MOOC activities
- Multilingual Materials: EN-SP-BG-NO-IT-CAT

FLED Tutorial Video Channel
<https://acesse.dev/fled-tool>



FLED Learning Design Tool
<https://fledtool.upf.edu/>





Why a MOOC?

ACRONYM

MOOC

Massive

Open

Online

Courses

MASSIVE

They are designed to be enjoyed by a **large number of** people

OPEN

They can be **accessed by anyone**, so they do not require any special participation requirements

ONLINE

They are accessible through an **online platform**

COURSES

Have **clearly established learning outcomes** and corresponding **curriculum**, learning support **materials and activities**, and an **assessment system**

REVIEW

A MOOC is characterized as a real course because it involves:

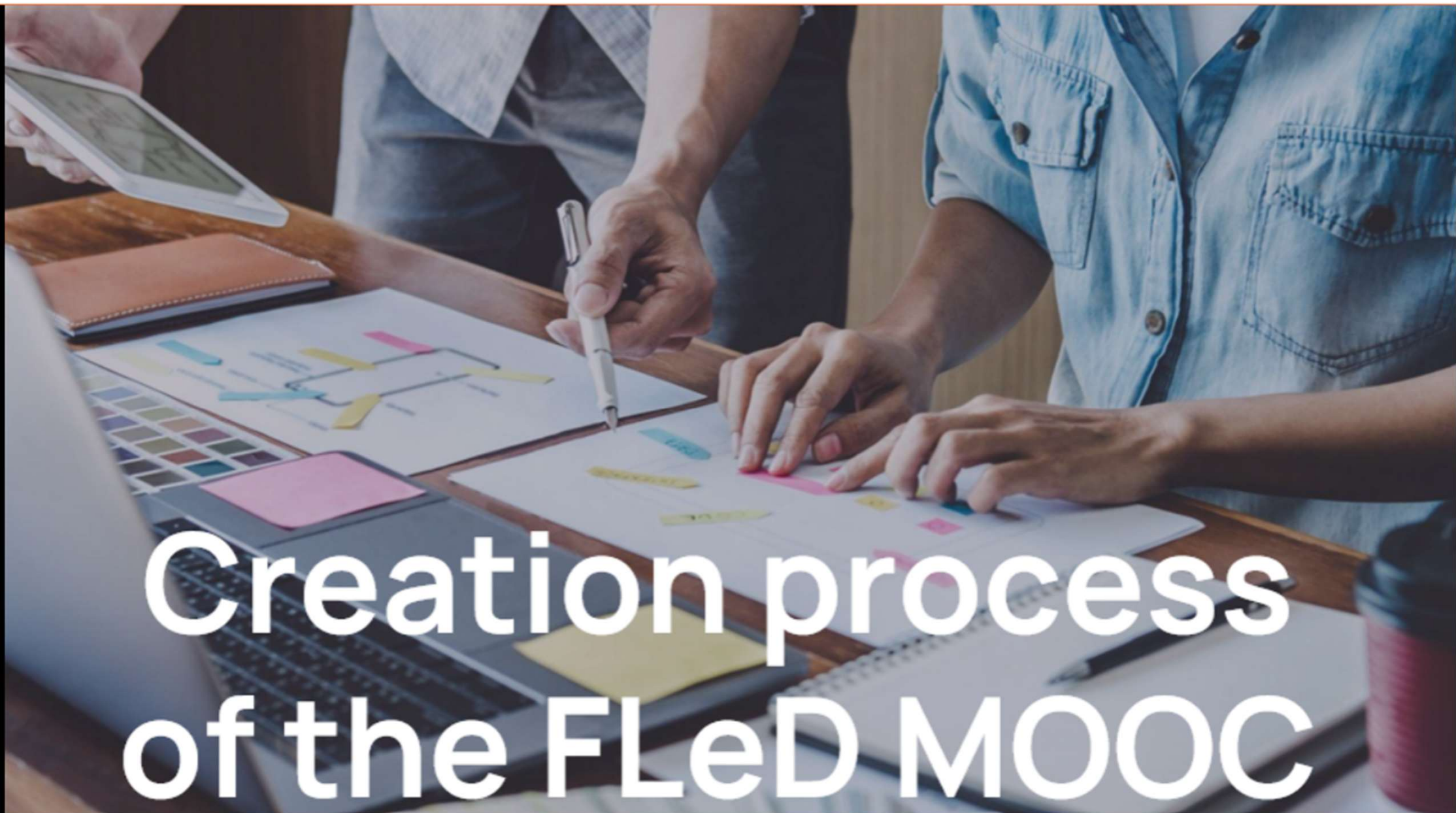
1. **Well-structured training paths** with:
 - a. Clear **learning objectives**
 - b. **Syllabus**
 - c. **Video and teaching materials**
 - d. **Activities**
 - e. An **assessment system** based on quizzes, exercises, projects, and/or peer-review
2. **Trailer** telling the course in 1-2 minutes
3. Limited duration and **organization into sections** that make fruition intuitive and logical (weeks, modules, or teaching units)
4. Obtaining a **final certificate: certificate of attendance or Open Badge)**

MATERIALS AND ACTIVITIES



Within a MOOC, however, different types of materials such as:

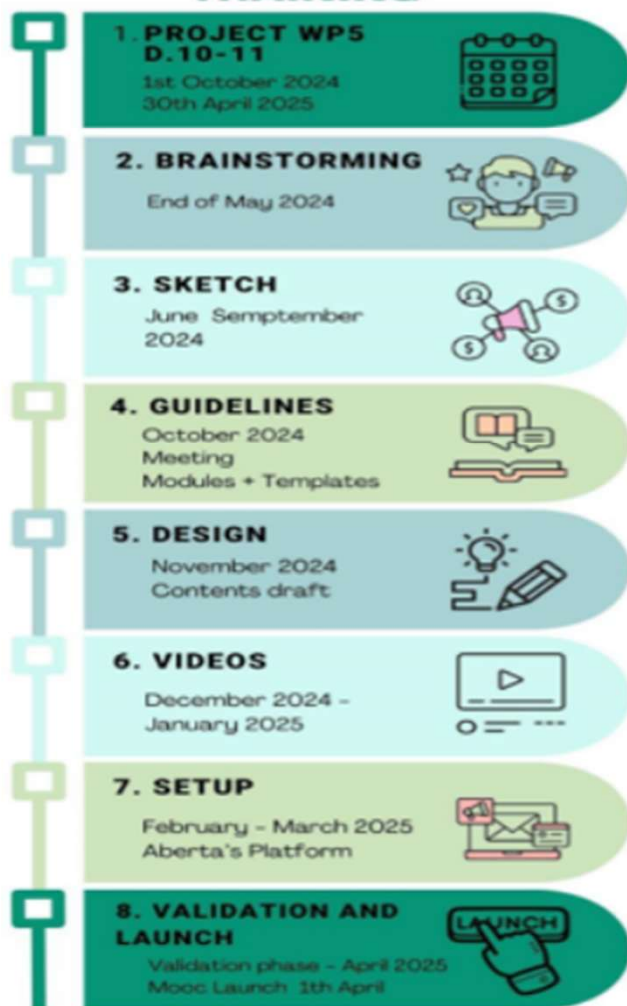
1. **Ad hoc designed videos** (most common format)
2. **PDFs, links, images and infographics** (also downloadable)
3. **Non-assessed assets**
4. **Assessment activities** (self-corrected tests and quizzes, collaborative contributions, discussions, and structured projects)
5. **Educational podcasts**
6. **AI systems** to support learning



Creation process of the FLeD MOOC

MOOC

SELF PACED VIRTUAL TRAINING











[HTTPS://FLEDTOOLUPF.EDU](https://fledtoolupf.edu)
[HTTPS://FLEDPROJECT.EU/FLED-TOOL/](https://fledproject.eu/fled-tool/)

FLeD MOOC: Self-paced Virtual Training

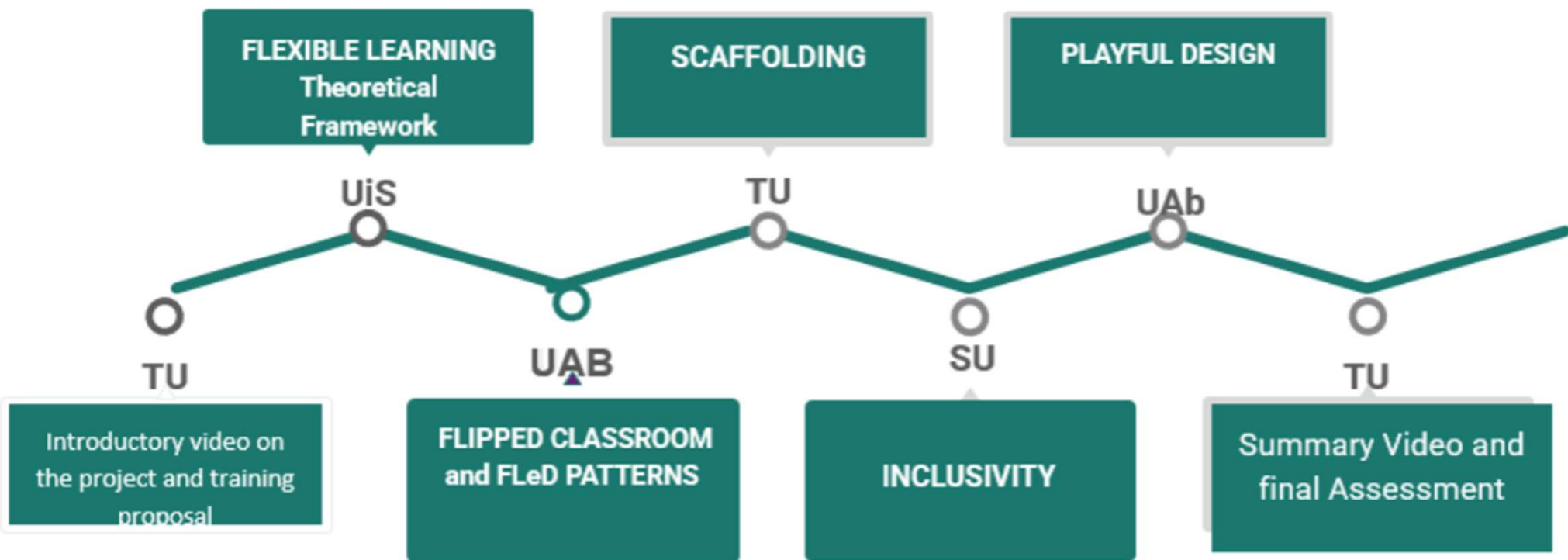
FLeD MOOC pedagogical pillars

| | | |
|----|---|---|
| 01 | Pedagogical innovation | <ul style="list-style-type: none">• Combines Flipped Learning with flexible design• Focuses on learner-centered, active engagement• Replaces passive learning with preparation + application• MOOC aligned with the FLeD Tool for hands-on practice |
| 02 | Integration of technology and learning design | <ul style="list-style-type: none">• Theory and design are interconnected through e-tivities• Resources embedded directly into design process |
| 03 | Community, collaboration and inclusion | <ul style="list-style-type: none">• Emphasis on networking among teachers• Peer interaction through forums and shared spaces• Supports professional development via co-construction |

FLeD MOOC Design: from concept to practice

| Phases of MOOC design | | | Key design principles |
|-----------------------|--|---|---|
| 1 ↓ | Shared index created <ul style="list-style-type: none"> • Collaborative roadmap among partners  |  | Theory meets practice <ul style="list-style-type: none"> • MOOC structure follows real instructional design flow |
| 2 ↓ | Pedagogical pillars defined <ul style="list-style-type: none"> • Flexibility, inclusion, flipped learning  |  | Multilingual & Inclusive <ul style="list-style-type: none"> • 6 languages, attention to special needs |
| 3 ↓ | Toolkit and tool integration <ul style="list-style-type: none"> • All modules linked to real resources  |  | Playful & Collaborative <ul style="list-style-type: none"> • Gamified challenges, peer interaction |
| 4 ↓ | Hands-on design <ul style="list-style-type: none"> • Participants build real designs as they learn  |  | Step-by-Step learning <ul style="list-style-type: none"> • Short videos → e-tivities → tool use |

MOOC DESIGN



+ TOOLKIT AND TUTORIALS
INTEGRATION

CREATION OF A SHARED INDEX

A **shared index** is created **among the entire working group and faculty**; the file is constantly updated and allows for continuous monitoring of the production phase.

| A | B | C | D | E | F | G | |
|-------------|---------------------------------|---------------------|---|-------------------------------------|-----------|-----------------------|-------|
| UNI | TOPIC | ITEM | IDEAS | CHECK LIST | LEAD TIME | TOTAL TIME FOR MODULE | NOTES |
| TRENTO - TU | INTRODUCTION TO THE MOOC COURSE | VIDEO | - short video with images to motivate participation in the course / then explanation of the structure and learning objectives - use of images and keywords | <input type="checkbox"/> | 5 mins | 25 - 30 minutes | |
| | | MOOC OVERVIEW | Moc contents | <input checked="" type="checkbox"/> | | | |
| | | ACTIVITY | Questionnaire on teaching experiences and difficulties in involving and making students participate | <input checked="" type="checkbox"/> | 10 mins | | |
| | | READINGS | Blog post on the website https://fledproject.eu/719-2/ - Unlocking the Potential of Flexible Learning: Introducing the FLeD Project | <input checked="" type="checkbox"/> | 8 mins | | |
| | | TOOL activity | Registration - see instructions | <input checked="" type="checkbox"/> | 5 min | | |
| | | TASK FOR ASSESSMENT | None// | | | | |



VIDEO LESSONS



5'-8' MINUTES video lessons on the topics

The video lessons are **completed by other information and study materials:**

- in-depth material from the slides presented in the video lesson
- practical activity (tasks)
- Multiple choice questions for assessment
- references-bibliography



+ **FLeD Toolkit and Tutorials**

ECTs EQUIVALENCIES - MOOC

1 ECTS MINIMUM ITEM: 6 hours online coursework + 19 hours student study time

6 hours: online teaching activity

At least 1 hour
Didactic Delivery (DE)

$DE = (\text{duration of video materials}) \times 2$

+

At least 1 hour
Interactive Didactics (DI)

DI = estimated duration of planned online interactive activities (forums, webinars, quizzes... except readings)

! Study materials (e.g., pdfs, textbooks, articles, web resources, and others) are counted as part of the student's study time, not in DE/DI

The calculation refers to the Guidelines in force at the time of disbursement for the initial accreditation of newly activated Courses of Study by the Commissions of Evaluation Experts (CEV) pursuant to Article 4, paragraph 4 of Ministerial Decree No. 47 of January 30, 2013 (as amended), promoted and adopted by ANVUR. Other methods of calculation must be made explicit and justified in relation to the methodologies adopted ([link](#))

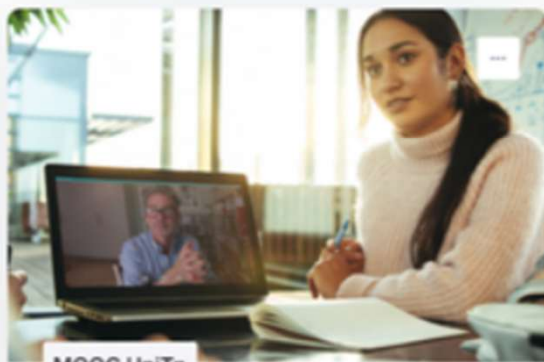
FLeD MOOC: Are you ready to flip?



My courses

All Starred

Sort by course name ▾



MOOC UniTn

Learning Design for Flexible
Education: Strategies and Tools

 HEI

[View Course](#)

UniTrento Mooc

<https://mooc.unitn.it/?redirect=0>





MOOC INTRODUCTION



LEARNING OUTCOMES

1. structure the design of inclusive flipped learning scenarios for diverse technology-mediated contexts.
2. promote playful and collaborative synergies for learning design.
3. take decisions for flexible learning design through the guidance and instructions provided by the Fled Tool.
4. increase their awareness of flexible learning under the flipped learning method.

MODULES

The MOOC consists of 5 modules + 2 not mandatory modules: - Main pedagogical theories - What are Flexible Learning and Flipped Classroom? - What you can do with the Tool, the patterns and how to use the Toolkit resources - Inclusivity matters - How to build flexible learning through Scaffolding strategies using our Guidelines - Gamification: our Fled Garden - Final module: let's review together

VALIDATION PHASE AND LAUNCH

MOOC PRODUCTION

Design
Video, materials and
Documents Creation
Mooc first Draft



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MOOC LAUNCH

MAY 2025

VALIDATION PHASE

2 PARTNERS VALIDATED THE
FIRST DEMO OF THE MOOC

[SURVEY: 10 PILOT TEACHERS
OF THE CONSORTIUM](#)

MOOC FINAL REVIEW

<https://elearning.uab.pt/>

USEFUL INFO



Visit the FLeD Project web:

<https://fledproject.eu/>

Enjoy the FLeD MOOC Experience!

<https://mooc.unitn.it/?redirect=0>

THANK YOU FOR YOUR ATTENTION!