

# “European network in D-flexible teaching (ENID-Teach)”

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## Result 1. Training program



Version 4.0



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## Table of contents

1. Introduction .....	7
1.1. ENID-Teach NOOC's characteristics .....	9
1.2. Collaborative Design in agile mode for each NOOC .....	11
1.3. Overall structure proposal.....	13
NOOC 1: Connected and Critical Methodology.....	13
NOOC 2: Collaborative and Research Methodology .....	13
NOOC 3: Active and Gamified Methodology.....	14
NOOC 4: Inverted and Flipped Methodology .....	15
NOOC 5: Designing Flexible Learning Programmes .....	15
Conclusion .....	16
1.4. Summary: NOOC's structure .....	16
1.4.1. Basic Information Sheet.....	16
1.4.2. Brief Guide.....	17
1.4.3. Complete Guide .....	17
2. Program: Digital training in digital and flexible methodologies .....	18
2.1. Connected and Critical Methodologies. Savoir*Devenir.....	18
Justification/ Introduction.....	18
Learning objectives.....	18
Aim of the NOOC.....	19
Teaching staff .....	20
Duration of the NOOC .....	20
Accessibility .....	20
Program/Contents: topics and sections.....	20

Structure .....	21
Methodology and tutoring process:.....	22
Complementary Material .....	26
Evaluation system: Evaluation and Qualification Criteria.....	26
Bibliography and resources.....	26
<b>2.2. NOOC 2. Collaborative and Research Methodology. Università degli Studi di Catania .....</b>	<b>27</b>
Justification .....	27
Knowledge Area: Educación /Education.....	27
Objectives .....	27
Program .....	28
METADATA .....	29
Recommended Requirements .....	29
Target audience of the course .....	29
Who is the course for? Recommended Student Profile .....	29
Additional readings/materials.....	29
Background.....	30
Teaching experience .....	30
Observations.....	30
Teaching staff .....	31
<b>2.3. NOOC 3. Active and gamified learning . Universidade Aberta de Portugal .....</b>	<b>33</b>
Justification .....	33
Knowledge Area: Educación /Education.....	33
Dates of realization:.....	33
Objectives .....	33

Program .....	34
METADATA .....	34
Recommended Requirements .....	34
Target audience of the course .....	35
Additional readings/materials .....	35
Background.....	35
Teaching experience .....	35
Observations.....	36
Teaching team .....	36
2.3. NOOC 4. Inverted Methodologies. Burgas Free University .....	38
Justification .....	38
Knowledge Area: Education.....	38
Dates of realization:.....	38
Objectives .....	38
Program .....	39
METADATA .....	40
Recommended Requirements .....	40
Target audience of the course .....	40
Additional readings/materials .....	41
Background.....	41
Teaching experience .....	42
Observations.....	42
Teaching team .....	42
2.5. NOOC 5. Design of flexible learning digital programs. Universidad Nacional de Educación a Distancia .....	44

Justification .....	44
Knowledge Area: Educación /Education.....	44
Objectives .....	44
Program .....	45
METADATA .....	46
Recommended Requirements .....	46
Target audience of the course .....	46
Additional readings/materials .....	46
Background.....	46
Teaching experience .....	47
Observations.....	47
Teaching team .....	47

# 1. Introduction

This is a pedagogical design proposal based on:

**1/ Audience:** Mainly university teachers and professors and as well as trainers, professors, teacher training schools.

**2/ Learning goals:** mastering D-Flexible Learning methodologies, applying microlearning techniques and Digital Competence of Educators, Empowering teachers with digital tools and competences in digital pedagogies.

The Noocs will more specifically be aligned with the European Framework for the Digital Competence of Educators (DiCompEdu p 16) and the UNESCO ICT Competency Framework for Teachers (ICT-CFT) through Open Educational Resources (OERs), in line with the SDG principle of “leave no one behind.” NOOCs are focused on the project proposal “ENID-TEACH”.

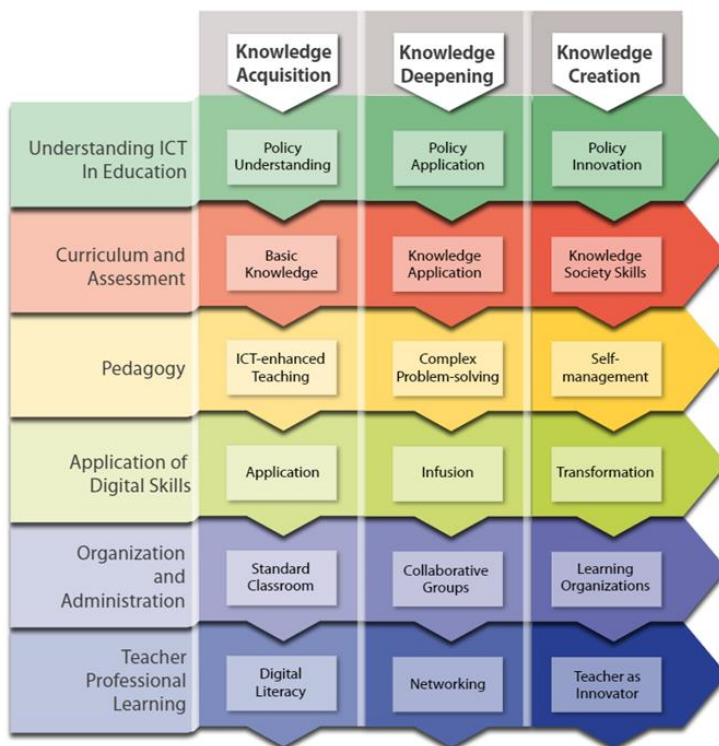
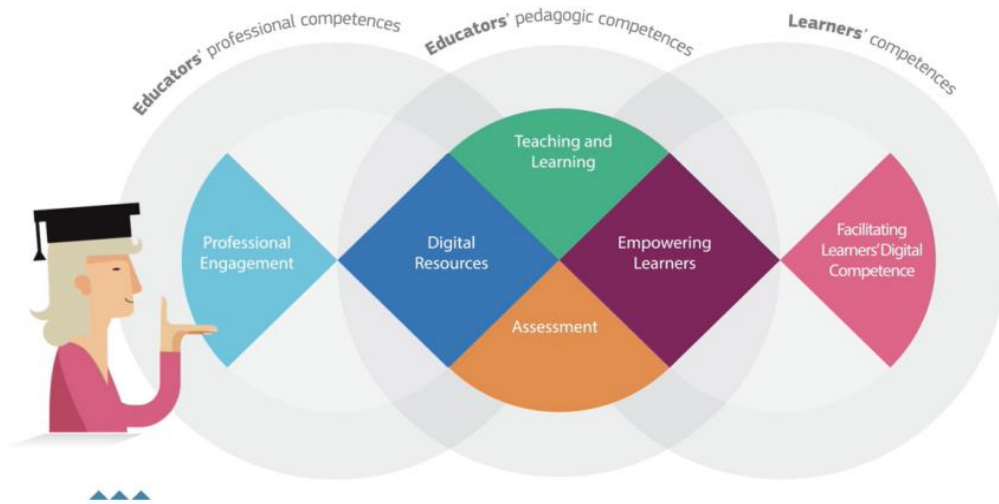
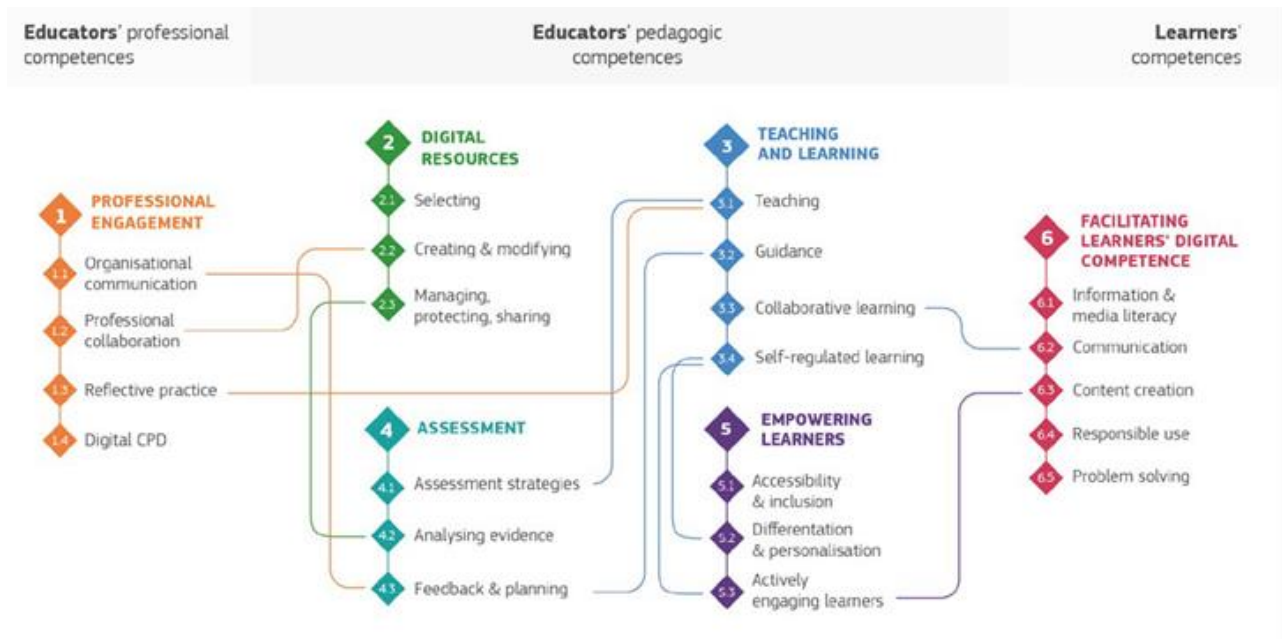


Figure 1. From UNESCO. ICT Competency Framework for Teachers, <https://en.unesco.org/themes/ict-education/competency-framework-teachers>



([https://joint-research-centre.ec.europa.eu/digcompedu\\_en](https://joint-research-centre.ec.europa.eu/digcompedu_en))



R2.1. NOOC 1. Connected and Critical Methodologies (Spanish, French, English, Italian and Portuguese)
R2.2. NOOC 2. Collaborative and Research Methodologies (Spanish, French, English, Italian and Portuguese)
R2.3. NOOC 3. Active and Gamified Methodologies (Spanish, French, English, Italian and Portuguese)
R2.4. NOOC 4. Inverted Methodologies (Spanish, French, English, Italian and Portuguese)
R2.5. NOOC 5. Designing Flexible Learning D-Programmes (Spanish, French, English, Italian and Portuguese)

## 1.1. ENID-Teach NOOC's characteristics

The design of the NOOCs within the ENID-Teach project was carried out with a structured approach based on flexibility, accessibility and interactive learning. The main features of the NOOCs are detailed below:

### *Duration and structure.*

Duration: 1 month.

Workload: 25 hours in total, distributed among content, interactive activities and autonomous work.

### *Technological environment (learning platform)*

Access and participation in the NOOCs were organized through a virtual platform that allowed the assignment of different roles and the use of interaction tools:

### *Participant roles:*

- NOOC coordination.
- Faculty.
- Facilitators.

*Communication tools:* Synchronous and asynchronous interaction channels were enabled, such as forums, social networks and other collaborative spaces.

*Gamification elements:* Game dynamics were incorporated to motivate participation.

*Follow-up tools:* Monitoring systems were implemented to evaluate student participation and progress.

### *Educational resources*

Each NOOC included open educational resources (OER) to ensure flexible and quality learning. Each course integrated:

- 10 OERs produced by MAG, distributed as follows:
- 5 descriptive resources: posters, presentations (PowerPoint), videos, etc.
- 5 interactive resources: Serious games, visualizations, augmented reality, simulations, virtual reality, among others.
- Additional resources: Existing global and local educational materials were shared.

### *Main pedagogical features*

- Multilingual: Each NOOC was developed in five languages: English, French, Italian, Portuguese and Spanish.
- Microlearning: Microlearning techniques were applied, organizing content into microunits or “learning nuggets” in different formats, facilitating progressive and fragmented learning.
- Audiovisual accessibility:
  - The contents were offered in various formats (audio, text, PDF) to ensure access to all people.
  - The videos included subtitles in the project languages.
  - PDF documents were designed to be accessible.
  - All resources were adapted to meet visual and auditory accessibility criteria.
- Organization of the NOOC according to learning hours
  - Each NOOC had a total load of 25 hours, distributed as follows:
  - Working with the contents (10 hours):
  - Readings: 5 hours.
  - Explanatory videos (5 videos of maximum 4 minutes): 2 hours in total, including visualization, reflection and study.
  - Interactive videos (5 videos of maximum 10 minutes): 3 hours in total, focused on practice, visualization, analysis and reflection.
- Interaction and communication (5 hours):
  - Discussion forums: 2 hours.
  - Participation in collaborative networks: 2 hours.
  - Gamification elements within the platform: 1 hour.
  - Mandatory final activity (peer-to-peer evaluation): 10 hours.

This structured model allowed for autonomous, accessible and interactive learning, optimizing participation and knowledge assimilation within a collaborative and multilingual environment.

## 1.2. Collaborative Design in agile mode for each NOOC

How has the collaborative work process been carried out within the consortium?

The development of the NOOCs within the consortium has been based on a collaborative working approach structured in different phases, involving international teams and implementing strategies to ensure pedagogical coherence and content quality. The main aspects of this process are detailed below.

### 1. Phases of the collaborative work

#### *Phase 1: Development of drafts and initial structure*

The process began with the delivery of a first draft that established the bases of the NOOC, including:

- The general characteristics of the course.
- The design of the collaborative work.
- A proposal for the general structure.

This first document was shared with the consortium in May 2022, allowing partner institutions to review and provide suggestions.

Subsequently, at the transnational meeting in Paris (July 2022), a second draft of the pedagogical model of the course was presented. This allowed for a joint review and the incorporation of improvements suggested by the consortium partners.

#### *Phase 2: Elaboration of the first NOOC guide*

Each working team developed a first version of the NOOC guide, which included:

- Rationale and introduction.
- NOOC objectives (one general and three to four specific objectives).
- Programme with a list of topics and a brief description of each one.
- Key course metadata.
- Additional materials and references.
- Profile of the teaching team.
- Course specifications (duration of one month and equivalence of 1 ECTS credit).

This document made it possible to standardise the structure of the NOOCs and to ensure pedagogical alignment between the different language versions.

### 2. Organisation of international teams

To manage the linguistic and cultural diversity of the NOOCs, international working teams were set up with representation from France, Italy, Spain and Bulgaria.

Each NOOC had a co-ordinating person responsible for organising the team and ensuring that the objectives were met. In the PartnetList.xlsx document, a UNED contact person was included for each NOOC, with the expectation that each partner would do the same.

During the transnational meeting in Paris (July 2022), these teams worked on the development of the NOOC guides, addressing the introduction, objectives and thematic structure.

### **3. Iterations and continuous improvement of the NOOC**

The collaborative work within the consortium was not limited to the design phase, but also included an iterative optimisation process based on feedback from the participants.

- Iteration 1: Initial assessment with a national focus group, led by the person responsible for each NOOC.
- Iterations 2 and 3: Incorporation of improvements based on feedback received through satisfaction questionnaires and other evaluation mechanisms.

### **Conclusion**

The collaborative working process within the consortium has allowed the co-creation of the NOOCs through a structured approach, based on the delivery of drafts, the organisation of international teams and a continuous improvement model. This approach has ensured pedagogical coherence and the adaptation of the course to different educational and linguistic contexts.

This collaborative working process has not only been key to the successful development of the NOOCs within the consortium, but can also serve as a model for any institution wishing to undertake a similar project. The combination of structured planning, well-organised international teams and an iterative approach to continuous improvement ensures the quality and relevance of content in diverse educational settings.

Moreover, progressive drafting, the definition of a clear pedagogical structure and the implementation of evaluation and optimisation strategies can be applied to any e-learning initiative. The experience gained in this project shows that collaboration between institutions in different countries enriches course design and broadens the scope of the course.

Thus, any institution interested in developing a NOOC or e-learning initiative can benefit from these strategies, adapting them to their specific context and needs for more effective and inclusive online learning.

## 1.3. Overall structure proposal

The development of the NOOCs in the ENID-Teach project was structured around different pedagogical methodologies, each focusing on a specific approach to digital teaching. Below are the key characteristics of each NOOC, their associated digital competencies, and the main topics covered.

### NOOC 1: Connected and Critical Methodology

This NOOC focused on developing critical and collaborative approaches in digital teaching.

#### Course Structure:

- Introduction
- Learning objectives
- Contents
- Tutoring process
- Complementary resources
- Activities
- Assessment system

#### Digital Competencies Developed:

The NOOC promoted networking and critical reflection, both individually and collectively, with the aim of enhancing teaching and professional development. (*DigCompEdu - Reflexive Practice, Professional Collaboration*).

#### Key Topics:

- Collaborating within educational networks.
- Contrasting offline and online pedagogical approaches.
- Integrating flexible approaches and criteria into course design.
- Applying eco-design recommendations in teaching.

### NOOC 2: Collaborative and Research Methodology

This NOOC focused on applying collaborative learning methodologies and research strategies in digital education.

#### Course Structure:

- Introduction
- Learning objectives

- Contents
- Tutoring process
- Complementary resources
- Activities
- Assessment system

### **Digital Competencies Developed:**

The NOOC covered strategies for group work and research methodologies applied to digital learning. (*DigCompEdu - Creating, Modifying, Protecting and Sharing, Analysing Evidence*).

### **Key Topics:**

- Creating open and networked learning spaces (Learning Management Systems, digital teaching environments).
- Choosing formats and tools for course presentations (text, video, games, podcasts, etc.).
- Using and adapting external resources while respecting licences and copyright.
- Selecting publication licences, prioritising open-access options.
- Complying with the General Data Protection Regulation (privacy, child protection in research).
- Designing and managing collaborative and collective activities.

## **NOOC 3: Active and Gamified Methodology**

This NOOC focused on developing active learning strategies and gamification as tools to enhance online teaching experiences.

### **Course Structure:**

- Introduction
- Learning objectives
- Contents
- Tutoring process
- Complementary resources
- Activities
- Assessment system

### **Digital Competencies Developed:**

The NOOC promoted active learning and the use of gamification strategies in pedagogical design. (*DigCompEdu - Actively Engaging Learners, Collaborative Learning*).

## **Key Topics:**

- Selecting and developing interactive activities, prioritising tools in national languages.
- Facilitating and mentoring in digital environments (online events, icebreaker activities, challenges, peer-to-peer communication, etc.).
- Implementing reward systems and issuing digital badges.

## **NOOC 4: Inverted and Flipped Methodology**

This NOOC explored the design of hybrid teaching models, integrating face-to-face and digital learning interactively.

### **Course Structure:**

- Introduction
- Learning objectives
- Contents
- Tutoring process
- Complementary resources
- Activities
- Assessment system

### **Digital Competencies Developed:**

The NOOC promoted active learning and the design of inverted online pedagogies.

### **General Objective:**

To implement teaching and learning designs based on blended models, where face-to-face and digital environments coexist and interact effectively.

## **NOOC 5: Designing Flexible Learning Programmes**

This NOOC focused on creating adaptive pedagogical designs for online education.

### **Course Structure:**

- Introduction
- Learning objectives
- Contents
- Tutoring process
- Complementary resources
- Activities

- Assessment system

### Digital Competencies Developed:

The NOOC explored online teaching strategies, self-regulated learning, assessment, accessibility, and inclusion. (*DigCompEdu - Teaching, Self-Regulated Learning, Assessment Strategies, Accessibility and Inclusion*).

### Key Topics:

- Adapting online pedagogical design to learners' levels and specific needs.
- Keeping up with new pedagogical trends.
- Conducting ongoing assessments throughout the course.
- Evaluating pedagogical design.
- Improving pedagogical design based on feedback and experience.

## Conclusion

The development of these NOOCs within the ENID-Teach project facilitated the exploration of diverse pedagogical methodologies, fostering educational innovation through collaborative learning, gamification, and flipped teaching. The digital competencies addressed ensured that educators were well-equipped for virtual environments, promoting flexible and accessible educational models for various teaching contexts.

## 1.4. Summary: NOOC's structure

The NOOC structure follows a progressive approach, moving from a **basic information sheet** to a **brief guide** and, finally, to a **complete guide** that includes detailed didactic materials and activities. Below is an outline of each component.

### 1.4.1. Basic Information Sheet

This section provides an overview of the NOOC, including its objectives, structure, and essential details:

1. **Justification** – Rationale behind the course.
2. **Objectives** – General and specific learning goals.
3. **Programme** – Structure of the course and key topics.
4. **Metadata** – Keywords defining the course.
5. **Recommended Requirements** – Prior knowledge or skills suggested for participants.
6. **Additional Readings/Materials** – Supplementary resources to enhance learning.
7. **Background** – Context or theoretical framework of the NOOC.



8. **Teaching Experience** – Qualifications and expertise of the teaching team.
9. **Observations** – Additional notes on the NOOC, including duration and credits.

## 1.4.2. Brief Guide

A condensed version of the NOOC structure, designed to provide essential details on the course methodology and organisation:

1. **Justification/Introduction** – Purpose and relevance of the course.
2. **Learning Objectives** – Expected outcomes for participants.
3. **Teaching Board** – Names and roles of the instructional team.
4. **Programme/Contents** – Overview of topics and sections.
5. **Methodology and Tutoring Process** – Teaching strategies and tutor support.
6. **Activities** – Description of the learning tasks.
7. **Evaluation System** – Assessment methods and grading criteria.
8. **Bibliography and Resources** – References and additional materials.

## 1.4.3. Complete Guide

An extended version of the brief guide, incorporating additional details and resources to fully structure the NOOC. Each NOOC consists of **four main topics plus a final section**, with the following elements for each topic:

1. **Presentation of the Topic** – Introduction and learning goals.
2. **Content and Didactic Material (Compulsory):**
  - **5 Descriptive Resources:** Posters, PowerPoint presentations, videos, etc.
  - **5 Interactive Resources:** Serious games, visualisations, augmented reality, simulations, virtual reality, etc.
3. **Additional Resources** – Complementary materials beyond the core course content.
4. **Activities** – Designed to reinforce learning:
  - **Compulsory Activities:** Peer-reviewed practical assignments.
  - **Voluntary Activities:** Suggested exercises that are not graded.
5. **Bibliography and Resources** – Complementary readings and references.

This structured approach ensures a well-organised NOOC, providing a balance between foundational knowledge, interactive learning, and practical application.

## **2. Program: Digital training in digital and flexible methodologies**

The teaching guides for each of the courses are presented below.

### **2.1. Connected and Critical Methodologies. Savoir\*Devenir**

#### **Justification/ Introduction**

The NOOC (Nano Open Online Course) “Connected and Critical Methodologies” is part of the training proposal of the project Erasmus +, “European network in D-flexible teaching (ENID-Teach)”, PROJECT NUMBER - 2021-1-ES01-KA220-HED-000027551, KA220-HED - Cooperation partnerships in higher education, coordinated by UNED. The main goal of the whole project is to provide a digital online training course for university lecturers about innovative teaching methodologies and coherent digital tools to enhance engagement in learning. Moreover, the project aims at building a distributed and cohesive cooperation network for the exchange of good practices and digital transformation among European teachers.

#### **Learning objectives**

The main objective of NOOC1 is to train professors and teachers in the design of connected and critical courses or modules by having a reflexive and responsive use of digital resources, with a student-centered perspective.

To help teachers take control of this innovative way of teaching and use it for the benefit of students’ motivation and professional course enhancement, five specific objectives guide this NANO course:

- Training teachers in the interpersonal and critical use of digital tools and social networks in educational scenarios
- Mastering connected learning, connectivism, with a focus on hyper-connection, networking and collaboration
- Appropriating methodologies for implementing connected and critical learning online and/or in class, based on universal accessibility and design criteria for learning
- Exploring the uses and possibilities of technology in education in collaboration with colleagues, students, instructional engineers and other stakeholders

- Developing critical and reflective capacities through the exploration of existing practices and the construction of individual and collaborative projects

## **Aim of the NOOC**

The main aim of NOOC1 is to introduce participants to the pedagogical strategies, the repertoire of postures and the actors' networks attached to connected learning, using social media interactions critically to build trusted circuits of validation and recommendation of knowledge. The final goal is to make teachers want to build their own solutions, alone or with others, in communities of practice, that can be internal or external to their institutions.

NOOC 1 builds on basic principles of connectivism that imply, inter alia, to contribute to the learning processes by:

- Fostering exchanges with a diversity of opinions and resources
- Using wisely the actors' logics available on the networks
- Resorting to non-human agents and processes to access quality information and verify information sources
- Mastering decision-making processes with critical thinking strategies, on the basis of information in context.

The importance on information for building knowledge justifies to combine connected methodologies with critical thinking strategies, to ensure trust and confidence in learning as well as encourage learners to practice and develop higher order reasoning (against cognitive biases) and complex problem-solving competences.

Therefore, NOOC1 also draws on the principles of Digital Media and Information Literacy to ensure pedagogical strategies are student-centred and aim at autonomy and creativity:

- Modular approach (training modules are devised to be useful as stand-alone as well as in multi-linear use)
- Authentic documents and examples (experience-based learning enhances motivation)
- Multi-stakeholder complexity in actors' logic (peers, colleagues, experts, communities of practice are key)
- Competence based (connectivism competences and critical thinking competences help co-design and provide transparency in the evaluation process)

- Spirit of inquiry (all modules start with questions)
- Critical, creative and reflexive learning (co-design is encouraged and facilitation activities aim at reflexivity and transfer).

## Teaching staff

Prof. Divina Frau-Meigs (U Sorbonne Nouvelle)

Dr. Adeline Bossu (U Bordeaux Montaigne)

Pascale Garreau (Savoir\*Devenir)

## Duration of the NOOC

NOOC1 is run as a Social NOOC three times, in January, June and November 2023. The last two sessions are delivered in all six languages of the partnership. After that it will become an Open Educational Resource (OER). Allow 25 hours (1 ECTs) of work, with various types of activities (reading, navigating on-line, communicating on forums and social networks, building your own resources).

## Accessibility

NOOC1 is available in 6 languages (English, French, Spanish, Portuguese, Romanian and Italian), and is designed and delivered according to the Universal Design for Learning (UDL).

To guarantee the accessibility of the resources to people with disabilities, the materials provided are presented in multiple formats (videos, texts, interactive activities, forums, etc.). Additionally, pdf. transcripts of all the audio materials are available in the Supplementary Material section of the platform.

## Program/Contents: topics and sections

NOOC1 consists of 5 main units (two of which build on each other to foster “co-design in action”). The final unit is dedicated to evaluation (peer-to-peer evaluation and satisfaction questionnaire). The first unit introduces the participants to the Eco digital learning platform, a connected resource in its own right. Units two and four are content oriented, each of them with three micro-lesson modules. Units three and five are organized as training modules for co-design in connected and critical activities. They

all add up to a total of 25 hours of work. Participants are free to shift from one unit to the other at their own rhythm, at home or remotely, with mobile if need be.

The units and modules are organized as follows, on the Eco digital learning platform:

- The upper part of the screen presents a micro-lesson (lasting 5-10 minutes, with pdf. transcription in the “Supplementary Material” section).
- The lower part of the screen provides “instructor’s comments” that provide some focus on the micro-lesson, followed by activities and tips (especially for using digital tools and online resources).
- The “supplementary material” section invites you to explore further readings, additional activities and resources.

## Structure

01	Presentation and online interactions with ECO platform	M1 General presentation of NOOC1: stakes, structure, course guidelines  M2 General presentation of ENID Project and platform tutorials
02	Connected learning: definitions and stakes	Connectivism  Actors’ logics and networks  Connected learning strategies and integration into digital learning systems
03	Co-design in action (1)	Designing it together: collaborative monitoring  Digital toolbox construction  Self-assessment quiz
04	Critical thinking in a digital context	Definitions and educational stakes  Connected and critical pedagogical postures  Critical and connected resources
05	Co-design in action (2)	Designing it together: collaborative monitoring  Digital toolbox construction  Self-assessment quiz

## Methodology and tutoring process:

### General description

NOOC1 is designed to train teachers to develop online learning processes and critical resources in a connected fashion. In the connectivist approach, the two positions complement each other: criticism is co-constructed with others; it is a form of joint attention, in mirror form, where the person making a proposal and the person criticising it form a link and help each other. The mirror form consists in showing the process and the tools used, not just the end result. This leads to a certain “epistemic maturity”, that is to say an awareness of the circuits of validation and recommendation of information.

The focus is on the competences that enable this kind of co-design, in a framework where competences are a combination of knowledge, attitudes, aptitudes and skills.

The connectivism competences underlined are:

- **being open to others**: recognizing differences in thinking, reasoning, experience
- **assuming tolerance of error**: seeing mistakes not as a stigma but as a way of improving oneself or one's journey, one's project
- **adopting a posture of decentering**: distancing oneself from one's feelings and affects and listening to others' proposals and projects
- **showing empathy**: putting yourself in another person's situation to understand their desires, motivations and fears
- **mastering agility**: adapting quickly to change and taking into account feedback to change the device, the resource, or the project if necessary.

The critical thinking competences underlined are:

- informing oneself
- **evaluating** information
- **distinguishing** between facts and their interpretations
- **confronting** interpretations
- **evaluating** interpretations.

This type of approach emphasizes the process of constructing knowledge in an interconnected collaborative way that departs from more traditional ways of transmitting knowledge. In order to foster this approach, NOOC1 offers many activities that encourage co-design of materials and resources, as well as tutoring and mentoring among peers, while fostering interactions online (forums, walls, posts...). This approach aims at building trust and support, in presence and at a distance, as the recent pandemic has shown the necessity to be agile and flexible and control rather than be submitted to technological devices.

### **Communication system:**

- Eco Digital learning platform Forum
- EPALE.eu community group
- Social networks
- E-mail: [enidteach@savoirdevenir.net](mailto:enidteach@savoirdevenir.net)

### **Activities**

#### **Non evaluated activities**

Each unit presents

- a micro-lesson section, either in video or power-point format, that invites to some interactive browsing and online navigating (hyperlinks open to new pages).
- instructor's comments section suggests a wide variety of activities that are going to solicit the participants' connectivist and critical thinking competences. Some of these activities are reflexive, to be conducted alone, others are shared with peers and connected online.

**Knowledge:** the topic of the unit is developed further, guided by some questions. Suggested reading is available in the complementary materials section (in pdf format or hyperlinks). The quizzes at the end of unit 2 and 4 are a self-assessment ploy to check on the main points to remember.

**Attitude:** some activities are devised to put participants in critical and connected mode, to find and share materials, to exchange about how to go about learning. They invite you on the forum of the platform to interact with other participants, discuss ideas and

be critically aware. Some activities are collaborative and invite you to explore resources, on a collaborative wall (with Padlet).

**Aptitude;** some activities are devised to help participants go about a task and develop abilities. A red-thread activity, in the two co-design units (3 and 5), invites you to a monitoring task around connectivism and critical thinking, with the focus on pertinent sensible practices.

**Skills:** some tips are provided with all the activities, that give participants examples of possible uses of some proposed digital resources and the tools, applications and services to create them. They complement the critical micro-lesson in unit 4 about connected resources that also suggests criteria for selection. This encourages participants to build their own toolbox.

These kinds of activities are voluntary and are not evaluated for the final assessment and certification. But they are highly recommended to improve competences and modify pedagogical postures and develop new strategies.

### **Evaluated activities**

Unit 6 suggests a peer-to-peer activity that will be evaluated by another participant, via the Eco digital learning platform, without the intrusion of the course staff. It is part of the tutoring methodology, in the connectivist and critical approach, inviting to exercise a joint attention to the work of others, in mirror form. The criteria for evaluation are clearly stated and are indicative of how to produce constructive, critical feedback.

Unit 6 also invites you to fill in a satisfaction questionnaire, that will be anonymous. It is part of the connectivist and critical approach, in mirror form, as you are invited to analyse your experience of the course and signal some suggestions and recommendations. This feedback will be used by the course staff to improve the next iteration, in agile methodology.

These two activities are voluntary and are not evaluated for the final assessment and certification. But they are highly recommended to improve competences and modify pedagogical postures and develop new strategies.

### **OERs**

Nooc1 presents a series of descriptive and interactive resources produced by the Savoir\*Devenir staff, designed to introduce participants to different ways of presenting and accessing connected and critical learning as well as providing them practical example of how to use some digital tools and produce their own resources.



Some of these activities and micro-lessons will become OERs (Open Electronic Resource) at the end of the project.

#### Interactive Resources

UNIT 2 Module 1 – Interactive image of pedagogical models with Genial.ly

UNIT 2 Module 2 – Interactive video with questions inserted implemented with H5P

UNIT 2 Module 3 – Interactive infographics on connected learning strategies with Genial.ly

UNIT 4 Module 1 – Interactive image of critical thinking competences with Thinglink

UNIT 4 Module 2 – Interactive slideshow on connected and critical postures with Genial.ly

UNIT 4 Module 3 – Interactive slideshow on critical and connected resources with Genial.ly

#### Descriptive Resources

UNIT 1 Module 1 – Video + pdf

UNIT 1 Module 2 – Video + pdf

UNIT 2 Module 1 – Slideshow with avatar (ppt+video) +pdf

UNIT 2 Module 2 – Drawing with Sketchpad

UNIT 4 Module 1 – Slideshow with cameo (ppt+video) +pdf

Additional Interactive and Descriptive Resources are used for activities and facilitation by tutors

UNIT 1 Module 1 – Collaborative wall (Padlet) for mapping; forum

UNIT 2 Module 1 – Word cloud (AnswerGarden); Survey (Google.docs)

UNIT 3 Module 2 – Collaborative wall (Padlet) for monitoring; quiz (Eco platform)

UNIT 4 Module 1 – Word cloud (AnswerGarden) ; forum

UNIT 4 Module 2 – Collaborative wall (Padlet); forum

UNIT 5 Module 3 – Collaborative wall (Padlet) for monitoring; quiz (Eco platform)

UNIT 6 Module 1 – Survey (Google.docs)

The micro-lessons are introduced either by a descriptive resource or by an interactive resource. Each module is introduced by a short micro-lesson (5-10 minutes), with subtitles (in the case of videos) and pdf format transcriptions in the 6 languages used in the project.

## **Complementary Material**

NOOC1 has a separate section for “Complementary Materials”. In this section there are supplementary documents (readings, viewings...) to go further with the proposed topics. There are also documents in pdf formats that are the transcriptions of the micro-lessons.

## **Evaluation system: Evaluation and Qualification Criteria**

### **Forms of evaluation within the Eco Digital learning platform:**

Self-Evaluation: it includes quizzes, analysis of pertinent sensible practices, short tests and surveys.

Peer to peer evaluation (unit 6): it involves submitting on the platform your idea for a pedagogical scenario or for your teaching practice with a connected and critical approach. You will be evaluated by another peer and asked to evaluate some other peer as well.

## **Bibliography and resources**

The format of citations and bibliographic references should follow the seventh edition of the Publication Manual of the American Psychological Association (APA).

The whole NOOC and its resources is under Creative Commons License CC BY SA.

## **2.2. NOOC 2. Collaborative and Research Methodology. Università degli Studi di Catania**

### **Justification**

This NOOC is part of the formative proposal of the Erasmus + project, "European network in D-flexible teaching (ENID-Teach)", PROJECT NUMBER - 2021-1-ES01-KA220-HED-000027551, KA220-HED - Cooperation partnerships in higher education, coordinated by UNED. It is NOOC2 of the training proposal.

The training program seeks to respond to the difficulties in carrying out the functions of teachers in situations of uncertainty, such as the crisis caused by COVID19, which has taught us that educational institutions must be prepared to respond to unexpected situations. We need to deploy a progressively more digitalized and flexible model without this entailing a drop in educational standards or the end of face-to-face teaching.

### **Knowledge Area: Educación /Education**

NOOC Iterations in different languages (English, Italian, Spanish, Portuguese, and French):

- Iteración 2. 19/06/2023 al 19/07/2023
- Iteración 3. 19/11/2023 al 19/12/2023

### **Objectives**

The main goal of the whole project is to provide a digital online training course for university lecturers and other teachers about Collaborative and Research teaching methodologies with the use of coherent digital tools to enhance engagement in learning. Moreover, the project aims at building a distributed and cohesive cooperation network for the exchange of good practices and digital transformation among European teachers.

The specific objectives are

1. Reflect about roles and rules of collaborative and research teaching methodology to be applied in academic contexts.
2. Discover the Computer supported collaborative and research methodology with its roles, rules and netiquette.

3. Explore the most useful digital environments and tools to favor a collaborative form of teaching and learning according to the criteria of Universal Accessibility and Universal Design for Learning.
4. Advance in the development of collaborative teaching courses and Inquiry based teaching methodology, which conform to the principles of “Distributed cognition” and “Computer Supported Collaborative learning”.
5. Deepen the process of collaborative design of digital learning programs and proposals introducing diverse forms of evaluation (peer to peer, summative, etc.).

## **Program**

### Topic I. Course presentation

1.1. What is this NOOC about and who we are?

1.2. Structure and Guidelines

### Topic II. Collaborative Learning

2.1. Collaborative Learning Theory

2.2. Getting Started with CL

2.3 CL and Inquiry based Learning

### Topic III. Pillars of Collaborative Learning

3.2. Distributed Cognition

3.3. Collaboration Theory and Computer Supported Collaborative Learning

### Topic IV. Digital Environment

4.1. Digital tools for CSCL.

4.2. Designing for online

### Topic V. Evaluation and Collaborative Research

5.1. Assessment

5.2. Collaborative Research for the future

Topic VI Satisfaction Questionnaire

6.1 Satisfaction questionnaire (voluntary)

## **METADATA**

University teaching, collaborative learning, distributed cognition, digital tools, Inquiry based learning, computer supported collaborative learning (CSCL), collaborative research.

## **Recommended Requirements**

There are no prerequisites. Only necessary basic technological resources: computer and internet connection.

This NOOC will be provided in five languages: French, Italian, English, Portuguese, Spanish.

## **Target audience of the course**

## **Who is the course for? Recommended Student Profile**

University professors and other professors from different areas of education.

## **Additional readings/materials**

Hmelo-Silver C., Chinn C., Chan C., O'Donnell A. (eds.) (2013), *The International Handbook of Collaborative Learning*. Routledge.

Howard C., Schenk K., Discenza R. (eds.) (2004), *Distance Learning and University Effectiveness: Changing Educational Paradigms for Online Learning*. Information Science Publishing.

Santoveña-Casal, S. (Coord.) (2020). *Investigación e innovación en metodologías digitales basadas en el aprendizaje conectado, activo y colaborativo*. Editorial UNED.

Stahl, G., Koschmann, T., & Suthers, D. (2006). Computer-supported collaborative learning: An historical perspective. In R. K. Sawyer (Ed.), [Cambridge handbook of the learning sciences](#) (pp. 409-426). Cambridge, UK: Cambridge University Press.

## Background

Indicate if your course has been previously taught on another UNED platform (aLF, OCW, iTunesU...)

This course will be taught on ECO Digital Learning platform.

Several courses aimed at training teachers and other education professionals have been taught by the teachers responsible for this NOOC.

## Teaching experience

Trajectory or profile of the teacher or teaching team in relation to the course or its theme of the teacher.

The UNICT teaching staff has experience in University Teaching (both Bachelor and Master Degree, as well as PhD Programm); Didactic Coordination for Degrees in Social Education, Pedagogy, Foreign Languages and Literatures; Audiovisual Translation in Master Degree; Digital tools for Education in schools and universities.

In addition, they have experience in managing and teaching MOOCs through the ECO LEARNING platform.

The faculty of the other universities are highly experienced in open learning as well as in formal university education.

## Observations

Add the observations you consider appropriate: specific needs of the course, justification for the duration other than 3-4 weeks and 1 ECTS credit -if applicable-, etc.

NOOC2 provides 25 hours of work divided into short units named Nuggets to provide a high level of flexibility for the users.

NOOC2 will provide iterations in different languages (English, Italian and Spanish, Portuguese, French):

- Iteración 2. 19/06/2023 al 19/07/2023
- Iteración 3. 19/11/2023 al 19/12/2023

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## Teaching staff

Università degli Studi di Catania Teaching team (NOOC in Italian)

NOOCs Coordinator:

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Teachers of the course:

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Prof. Dr. Ana Yelena Guarte ([yeleragua@gmail.com](mailto:yeleragua@gmail.com))

Prof. Dr. Ana Yelena Guarate, [yeleragua2009@hotmail.com](mailto:yeleragua2009@hotmail.com)

Burgas Free University Teaching team (NOOC in English)

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Universidade Aberta de Portugal Teaching team (NOOC in Portuguese)

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## **2.3. NOOC 3. Active and gamified learning .**

### **Universidade Aberta de Portugal**

#### **Justification**

The NOOC 3 (nano open online course) is a training course proposed by the project Erasmus +, “European network in D-flexible teaching (ENID-Teach)”, PROJECT NUMBER - 2021-1-ES01-KA220-HED-000027551, KA220-HED - Cooperation partnerships in higher education, coordinated by UNED. This NOOC is based in microlearning and introduces you to a general overview of the active and gamified learning methodologies and tools in higher education. We will introduce you to learning theories and methodologies that promote students’ active participation and engagement in learning activities and with application in different learning contexts and teaching practices.

#### **Knowledge Area: Educación /Education**

#### **Dates of realization:**

NOOC Iterations in different languages (English, Spanish, Portuguese, Italian and French):

- Iteration 1. 15/06/2023 al 15/07/2023 (English, Portuguese)
- Iteration 2. 15/11/2023 al 15/12/2023 (English, Spanish, Portuguese, Italian and French)
- Iteration 3. 06/05/2024 al 06/06/2024 (English, Spanish, Portuguese, Italian and French)

#### **Objectives**

The main objective of the NOOC is training through a microlearning approach in the design of teaching and learning following active and gamified methodologies:

The specific objectives are:

- 1) to introduce what is Active Learning - being active, interactive, and constructive.
- 2) to understand what interactivity and interaction in learning

- 3) to experiment some methodologies and strategies for active learning
- 4) to understanding what gamification and its applications is in learning;
- 5) to know digital tools for gamified learning;
- 6) to design gamified learning activities

## **Program**

List of topics, Number, titles and brief description of each of the topic that make up the course.

### Topic I. Active Learning

- 1.1. What is Active Learning? Being Active, Interactive, Constructive.
- 1.2. Digital Technologies and Active Learning: understanding Interactivity and Interaction.
- 1.3. Three types of Interaction: Teacher-Student; Student-Student; Student-Content.
- 1.4. Transactional Distance and Transactional Control.

### Topic II. Gamification.

- 2.1. Gamification concept and advantages and applications.
- 2.2. Impacts and Experiences of using gamification.
- 2.3. Tools for gamified learning.
- 2.4. Design a gamified learning activity.

## **METADATA**

Type at least 10 metadata that defines your course, in comma-separated values.

University teaching, microlearning, flexible design, active learning, interaction, digital contents, gamification, participation, experience, educational programs.

## **Recommended Requirements**

Previous knowledge, languages, technologies, etc.

There are no prerequisites. It is necessary for its realization the basic technological resources: computer and internet connection. This NOOC will be able in five languages: French, Italian, English, Portuguese, Spanish.

## Target audience of the course

Who is the course for? Recommended Student Profile

University professors and other professors from different areas of education.

## Additional readings/materials

Chi, M.T.H. (2009). Active-Constructive-Interactive: A Conceptual Framework for Differentiating Learning Activities. *Topics in Cognitive Science*, 1, 73-105. Doi: 10.1111/j.1756-8765.2008.01005.x

Gomes, C., Pereira, A. (2021). Feedback e Gamificação em Educação Online. *EaD em Foco*, 11,(1), 1-15. <https://doi.org/10.18264/eadf.v11i1.1227>.

Quintas-Mendes, A., Wyszomirska, R. M., Cabral, P. B. (2019). Desenho de aprendizagem e ferramentas conceituais para o desenho de cursos online, In Torres, P., Amante, L.(eds). *Educação e tecnologias web: contributos de pesquisa luso-brasileiros*, Curitiba: Ed. Appris.

Saraiva, F. B., Morgado, L., Rocio, V. (2019). Gamificação de uma plataforma social académica numa Universidade de Ensino a Distância, *Revista de Educação a Distância e Elearning*, 2, (1), 120-153, <https://doi.org/10.34627/vol2iss1pp120-153>.

## Background

Indicate if your course has been previously taught on another UNED platform (aLF, OCW, iTunesU...)

This course will be taught on ECO Digital Learning platform. Several courses aimed at training teachers and other education professionals have been taught by the teachers responsible for this NOOC.

## Teaching experience

Trajectory or profile of the teacher or teaching team in relation to the course or its theme of the teacher.

The UAb teaching staff has experience in Degree programs (Education and Pedagogy) in subjects related to the course, in official Postgraduate (eLearning Pedagogy and Doctoral program of distance Education and eLearning) and in various permanent training courses. All in the field of knowledge.

In addition, they have experience in managing and teaching MOOCs through various platforms and the ECO LEARNING platform.

## Observations

Add the observations you consider appropriate: specific needs of the course, justification for the duration other than 3-4 weeks and 1 ECTS credit -if applicable-, etc.

This NOOC is part of the training proposal of the project Erasmus +, “European network in D-flexible teaching (ENID-Teach)”, PROJECT NUMBER - 2021-1-ES01-KA220-HED-000027551, KA220-HED - Cooperation partnerships in higher education, coordinated by UNED. The main goal of this project is to provide digital training to university lecturers around online teaching and engage them in building a distributed yet cohesive cooperation network for the exchange of good practices and digital transformation.

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## Teaching team

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Italian version Università degli Studi di Catania Teaching team Renata Gambino, [renatagambino@gmail.com](mailto:renatagambino@gmail.com) (Coord. Italian version)

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Salvatore Ciancitto, [salvatoreciancitto@gmail.com](mailto:salvatoreciancitto@gmail.com)

## **2.3. NOOC 4. Inverted Methodologies. Burgas Free University**

### **Justification**

This NOOC is part of the training proposal of the Erasmus + project, "European network in D-flexible teaching (ENID-Teach)", PROJECT NUMBER - 2021-1-ES01-KA220-HED-000027551, KA220-HED - Cooperation partnerships in higher education, coordinated by UNED. It is NOOC 4 of the training proposal.

The training programme seeks to respond to the difficulties in carrying out the functions of teachers in situations of uncertainty, such as the crisis caused by COVID19, which has taught us that educational institutions must be prepared to respond to unexpected situations. We need to deploy a progressively more digitalised and flexible model without this entailing a drop in educational standards or the end of face-to-face teaching.

### **Knowledge Area: Education**

#### **Dates of realization:**

- Iteration 1. 15/06/2023 al 14/07/2023 (In English and Spanish)
- Iteration 2. 01/11/2023 al 30/11/2023 (In English, Spanish, Portuguese, Italian and France)
- Iteration 3. 01/05/2024 al 30/05/2024 (In English, Spanish, Portuguese, Italian and France)

### **Objectives**

The main objective of the NOOC is training in the inverted teaching methodologies and flipped classroom model and instructional strategy designed in line with the approach Learning for All.

The specific objectives are:

1. Development of the critical and reflective capacity to use inverted (flipped) methodologies to ensure learning personalization as well as the transforming of the classroom into an inclusive and more dynamic and interactive space.
2. Advance in designing and usage efficient combinations of flipped classroom models and strategies to support more engaging student-centred active learning.

3. Explore the potential and use of digital technology and tools to create digital content that ease autonomous learning, contribute to a deeper understanding of topics, and increase students' motivation.

4. Improved expertise in using unconventional teaching approaches and online technology to ensure engaging educational experiences.

5. Advance in using the potential of online communities and collaboration platforms for sharing content and expertise and cooperative work in the design of a teaching programs based on inverted methodologies.

## Program

List of topics, Number, titles and brief description of each of the topic that make up the course.

Topic I. Inverted Methodologies – Theoretical Framework

- 1.1. Difference between classical and flipped learning - fundamental concepts and principles
- 1.2. Advantages and disadvantages of flipped classes

Topic II. Flipped Classroom Implementation – Models and Strategies.

- 2.1. Types of flipped classroom structures
- 2.2. Approaches for inverted methodology implementation

Topic III. Preparation of Flipped Learning Content

- 3.1. Types of content for the flipped classroom lectures
- 3.2. Preparing video lectures – technical issues
- 3.3. Tools for preparing video lectures
- 3.4. Enhanced video design
- 3.5. Platforms to store and use video lectures

Topic IV. Open educational resources (OER) and Collaboration Platforms

- 4.1. Open educational Resources
- 4.2. Creative Commons licenses
- 4.3. Platforms and communities for cooperative work
- 4.2.1. Intercreative workshop (Option A)
- 4.2.2. Intercreative workshop (Option B)

Topic V. Design your flipped classroom

- 5.1. Pro-common proposal: We share
- 5.2. Final task

Course closing topic. Design of flipped classroom scenarios

## **METADATA**

Type at least 10 metadata that defines your course, in comma-separated values.

University teaching, microlearning, inverted teaching, flipped classroom model, students center-activities, just-in-time teaching.

## **Recommended Requirements**

Previous knowledge, languages, technologies, etc.

There are no prerequisites. It is necessary for its realization the basic technological resources: computer and internet connection. This NOOC will be able in five languages: French, Italian, English, Portuguese, Spanish.

## **Target audience of the course**

Who is the course for? Recommended Student Profile

University professors and other professors from different areas of education.



## Additional readings/materials

1. Altemueller, L.; Lindquist, C. (2017). Flipped classroom instruction for inclusive learning. *British Journal of Special Education*. 44 (3): 341–358. doi:10.1111/1467-8578.12177
2. Bergmann, J., & Sams, A. (2014). *Flipped learning: Gateway to student engagement*. Eugene, OR: International Society for Technology in Education.
3. Bishnoi, M. (2020). Flipped classroom and digitization: an inductive study on the learning framework for 21st century skill acquisition. *JETT*, 11(1), 30-45. <https://files.eric.ed.gov/fulltext/ED579204.pdf>
4. Colomo-Magaña, E., Soto-Varela, R. & Ruiz-Palmero, J. (2020). University Student´s Perception of the Usefulness of the Flipped Classroom Methodology. *Education Sciences*, 10(10), 275. <https://doi.org/10.3390/educsci10100275>
5. Flipped Learning Network. (2014). *The four pillars of F-L-I-P*. South Bend, IN: The Flipped Learning Network. Retrieved from <http://www.flippedlearning.org/definition>.
6. Galindo-Dominguez, H. (2021). Flipped Classroom in the Educational Systems: Tend or Effective Pedagogical Model Compared to Other Methodologies? *Educational Technology & Society*, 24(3), 44-60.
7. Gil-Quintana, J. (2021). ¿Quieres ser Influencer de aprendizaje? ¡Acepta el reto de la educación para la sociedad postdigital! Editorial Icaria.
8. Jeong, J.S.; Cañada, F.; González, D. The Study of Flipped-Classroom for Pre-Service Science Teachers. *Educ. Sci.* 2018, 8, 163. <https://www.mdpi.com/2227-7102/8/4/163>
9. O'Flaherty, J.; Phillips, C. The use of flipped classroom in higher education: A scoping review. *Internet High. Educ.* 2015, 25, 85–95.
10. Santoveña-Casal, S. (Coord.) (2020). *Investigación e innovación en metodologías digitales basadas en el aprendizaje conectado, activo y colaborativo*. Editorial UNED.
11. Tolks D. et.al. (2016) The use of the online Inverted Classroom Model for digital teaching with gamification in medical studies. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4894356/>

## Background

Indicate if your course has been previously taught on another UNED platform (aLF, OCW, iTunesU...)

This course will be taught on ECO Digital Learning platform.

Several courses aimed at training teachers and other education professionals have been taught by the teachers responsible for this NOOC.

## Teaching experience

Trajectory or profile of the teacher or teaching team in relation to the course or its theme of the teacher.

The BFU teaching staff has experience in Multimedia telematics, Information security, Marketing, Audiovisual Communication; and in various permanent training courses.

In addition, they have experience in managing and teaching online learning courses delivered through BFU e-platform as well as in the framework of different national and international project related to using new methods and tools for education.

## Observations

Add the observations you consider appropriate: specific needs of the course, justification for the duration other than 3-4 weeks and 1 ECTS credit -if applicable-, etc.

This NOOC is part of the training proposal of the project Erasmus +, “European network in D-flexible teaching (ENID-Teach)”, PROJECT NUMBER - 2021-1-ES01-KA220-HED-000027551, KA220-HED - Cooperation partnerships in higher education, coordinated by UNED. The main goal of this project is to provide digital training to university lecturers around online teaching and engage them in building a distributed yet cohesive cooperation network for the exchange of good practices and digital transformation.

## Teaching team

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NOOC development support staff:

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Student

Community manager

Etc.

## SPANISH TEAM

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## **2.5. NOOC 5. Design of flexible learning digital programs. Universidad Nacional de Educación a Distancia**

### **Justification**

This NOOC is part of the formative proposal of the Erasmus + project, "European network in D-flexible teaching (ENID-Teach)", PROJECT NUMBER - 2021-1-ES01-KA220-HED-000027551, KA220-HED - Cooperation partnerships in higher education, coordinated by UNED. It is NOOC 5 of the training proposal.

The training programme seeks to respond to the difficulties in carrying out the functions of teachers in situations of uncertainty, such as the crisis caused by COVID19 , which has taught us that educational institutions must be prepared to respond to unexpected situations. We need to deploy a progressively more digitalised and flexible model without this entailing a drop in educational standards or the end of face-to-face teaching.

### **Knowledge Area: Educación /Education**

NOOC Iterations in different languages (English, Spanish, Portuguese, Italian and French):

- Iteración 1. 15/11/2023 al 15/12/2023
- Iteración 2. 15/05/2024 al 15/06/2024
- Iteración 3. 15/09/2024 al 15/10/2024

### **Objectives**

The main NOOC goal is training in the design of flexible digital learning programmes based on a common approach for all people.

The specific objectives are:

1. To know what flexible learning pedagogies and methodologies are: general context and variables.
2. To develop the ability to design flexible training programmes based on methodological richness (connected, active, collaborative, gamified and hybrid).

3. To identify the variables and degree of flexibility in our academic practice: organisational flexibility and teaching flexibility.

3. To learn how to design and publish accessible learning objects based on Universal Design for Learning.

4. To design a new programme based on flexible digital (or hybrid) methodology and pedagogy to improve educational equity.

## **Program**

Topic I. Flexible learning methodologies and pedagogies: general context and variables.

1.1. Definition and general context.

1.2. Intervening variables: organisational and pedagogic.

Topic II. Design of flexible training programmes based on methodological richness (connected, active, collaborative, gamified and hybrid).

2.1. Design of flexible programmes according to different methodologies.

2.2. Experiences and models developed according to the different methodologies.

Topic III. Flexible learning objects.

3.1. Conceptual approach to flexible learning models What do they help us?

3.2. Learning environments suitable for the development of flexible learning.

3.3. Flexible learning as a response to SAD: accessibility and content.

3.4. Digital spaces for flexible learning: Genially and Canva.

Topic IV. Inclusive and flexible education: universal learning design.

4.1. Universal Design for Learning (UDL).

4.2. The UDL and Technology.

4.3. How to analyse our own teaching practice in terms of inclusion and flexibility.

Topic V. Final design of the proposal.

5.1. Designing our flexible digital or hybrid methodology proposal 5.2.

5.2. Sharing designs!

5.3. Evaluation.

## **METADATA**

University teaching, flexible pedagogies, flexible design, active learning, digital contents, SAD, accessible learning objects, interaction, program design.

## **Recommended Requirements**

There are no prerequisites. It is necessary for its realization of the basic technological resources: computer and internet connection.

This NOOC will be able in five languages: French, Italian, English, Portuguese, Spanish.

## **Target audience of the course**

Who is the course for? Recommended Student Profile

University professors and other professors from different areas of education.

## **Additional readings/materials**

Santoveña-Casal (2021). Cartografía de la sociedad y educación digital (Investigación y análisis de perspectivas). Tirant lo Blanch.

Santoveña-Casal, S. (2023). Investigación en pedagogías digitales: conectadas, colaborativas, gamificadas y flexibles. Octaedro.

Santoveña-Casal, S. (Coord.) (2020). Investigación e innovación en metodologías digitales basadas en el aprendizaje conectado, activo y colaborativo. Editorial UNED.

## **Background**

Indicate if your course has been previously taught on another UNED platform (aLF, OCW, iTunesU...)

This course will be taught on ECO Digital Learning platform.

Several courses aimed at training teachers and other education professionals have been taught by the teachers responsible for this NOOC.

## Teaching experience

Trajectory or profile of the teacher or teaching team in relation to the course or its theme of the teacher.

The UNED teaching staff has experience in Degree (Social Education and Pedagogy) in subjects related to the subject, in official Postgraduate (Communication and Education on the Network; Audiovisual Communication; Secondary Master) and in various permanent training courses. All in the field of knowledge.

In addition, they have experience in managing and teaching MOOCs through the ECO LEARNING platform.

The faculty of the other universities are highly experienced in open learning as well as in formal university education.

## Observations

Add the observations you consider appropriate: specific needs of the course, justification for the duration other than 3-4 weeks and 1 ECTS credit -if applicable-, etc.

Es un NOOC de 25 horas, 1 ECTS, con una duración de 4 semanas.

Se impartirá en 5 idiomas diferentes: inglés, español, francés, portugués e italiano.

NOOC Iterations in different languages (English, Spanish, Portuguese, Italian and French):

- Iteración 1. 15/11/2023 al 15/12/2023
- Iteración 2. 15/05/2024 al 15/06/2024
- Iteración 3. 15/09/2024 al 15/10/2024

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## Teaching team

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