

DigiTeL Pro



Professional development in digital teaching and learning

DigiTel Pro Course for Online Teaching and Learning Guidelines and Resources

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How to use the guidelines and resources document

The aim of these guidelines is to provide you information, suggestions and tips to use the content and learning materials of the DigiTel Pro Course for Online Teaching and Learning in your own course offering. The guidelines are structured in two sections. Section A gathers the information on the course design. It shows the first important issues you have to tackle in order to implement the course in your institution, such as the selection of an learning platform, the selection of the modules you want to use, the approach(es) you intend to follow, and the resources you plan to use. It also provides some dissemination strategies, tips and suggestions to take into account before, during and after the course. Finally you can find the lessons learned raised from our experience during the realization of the course. Section B gathers the content of the course we implemented with the schematic information on each module: the problem (introduction, learning goal and learning outcome) and the learning activities (tasks which participants have to deliver, resources, and the kind of assessment), as well as all the links to the material and resources we used. The learning material designed for the course have been all collected and uploaded on the DigiTel Pro account on Zenodo repository available at this link: <https://zenodo.org/communities/digitelproproject/>.

Part A: course design

Implementing the course: first choices

Select the learning platform

Once you have decided to replicate the *Digital Pro Online Education Course*, the first decision to take is where the course should be hosted. If you already have your own online learning platform, it makes sense to use that, because you and your students will be familiar with its features and functions. For our course, you would need at least some collaboration and communication tools, such as a blog, a discussion forum and features like assignments and self-assessments to allow students to submit their work. If you do not have your own learning platform, you need to enquire into availability and maybe look for cloud-hosted solutions. To give you an indication, we used the learning platform that is used by the UOC because the UOC already provides online teaching. This platform is based on [Moodle](#), with some dedicated modifications. However, there are many good online learning platforms available, and some might suit your requirements better. In any case, consider the availability of tools that are needed to provide (parts of) our Online Education course. When opting for a new platform, also take into account that both teachers and students might need some tutorials in getting used to the platform. Consider the registration process and other requirements our organisation might have.

In our case we opted for the UOC platform, as the university, being exclusively online, has an adequate learning environment to accommodate such a course. This decision has both pros and cons that you should take into consideration when replicating the course. For one way, the learning environment was well structured and we had the possibility to take advantage of many tools included in the platform (forum, video presentation programme, discussion area), tutorials provided from the institution in order to better understand the use of the platform were also available for students. However, for the other way, we need for a registration in the platform, with a UOC email, and this made the process less smooth. Moreover, some students were not familiar with the learning environment and took time to understand how it works.

The image below shows UOC learning environment with some of its main features: the course plan and the timetable on the top, making a difference between continuous assessment activities and non-assessable activity, the video presentation (langblog) and dashboard (tablón), the assessment and resources sections.

The screenshot displays the UOC learning environment interface. At the top, there is a navigation bar with 'Classroom Design' and 'Change classroom' options. Below this, the course title 'DG.001 - The DigiTel Pro Course for Online Teaching and Learning classroom 1' is shown, along with a 'View coordinators' link. The main section is the 'Course plan', which features a calendar view from March 2022 to August 2022. It distinguishes between 'Continuous assessment activity' (indicated by red bars) and 'Non-assessable activity' (indicated by grey bars). Below the course plan, there is a section for 'Module 1. Definition of online education. Pedagogical approaches'. This section includes options to 'Download as PDF', 'Print', and 'Completed'. It also features a 'Langblog' section with a 'Tablón' (dashboard) section. The 'Tablón' section shows the current date as Tuesday, 05/07/22, 14:19, and lists the last day of the course as Wednesday, 22/06/22, 11:47. It also mentions 'Module 6 First Days!'.

Select the modules

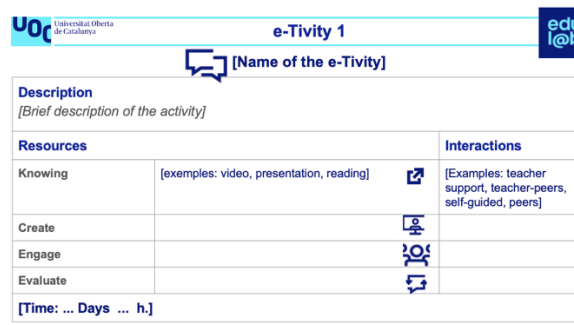
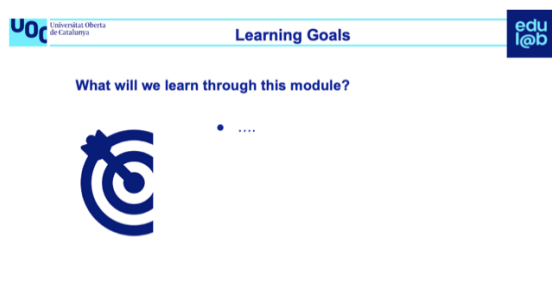
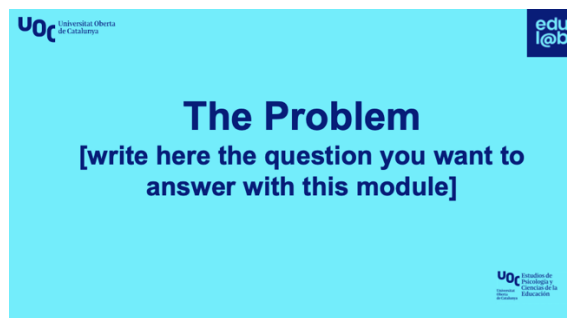
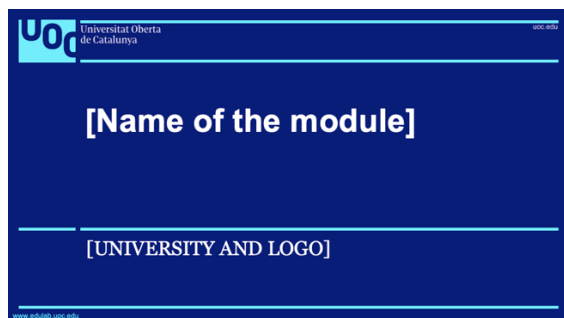
Our course was organized in 6 modules with the follow structure:

Name of the course	The DigiTel Pro Course for Online Teaching and Learning
Length	14 weeks in total, 6 modules
MODULES	
Module 1	Definition of online education. Pedagogical approaches
Module 2	Role of the teacher in online education
Module 3	Learning Design
Module 4	Orchestrating the Classroom
Module 5	Online assessment
Module 6	XR and learning models

You can chose to replicate the entire course, or only a few modules or part of them. In order to organize the material of each module we provide you with a template (available on Digitel Pro Zenodo Repository https://zenodo.org/record/7660547#.Y_SqJ-yCFQY) to collect the following information:

- Defining the problem of the module
- Defining the learning goals

Defining the learning activities, called e-tivities (referring to Salmon's e-tivities <https://www.gillysalmon.com/e-tivities.html>) to accomplish the goals, providing the resources (articles, videos, learning material, presentations etc), the tools (interaction tools as forum, blogs, teacher-peer, self-guided peers)



If you are interested in the content of each module you can find the related information in the Section b: Course Material of this guidelines.

Select the approach(es)

The concept of Online Education can be supported by different approaches and understood in different ways. In our case, the three institutions responsible of the course (Universitat Oberta de Catalunya; Open Unversiteit, Heerlen, the Netherlands; Università Telematica Internazionale) are used to different educational approaches to online education both asynchronous and synchronous. After several meetings aim at co-ideating the course, partners decided to include and show different strategies to implement online learning in order to give the possibility to participants to collect different kind of information. Furthermore, persons wishing to replicate the course in their institution can choose the approach most appropriate to their needs.

Select the resources

We will facilitate you all the open access material and references in the section B: course content. You can chose to use it all or just a selection. You can find most of the material used in the UOC O2 REPOSITORY (<https://openaccess.uoc.edu/>) which is a digital repository from UOC with 14,000 open access publications.

Disseminate the course

Depending on the purpose of the course you can choose different dissemination strategies. Should you want to re-use the course or content within your own course-offering, you can follow your own strategy. Should you want to make the course available to a wider public, you can follow some of the strategies we have applied.

Before the starting of the course, institutions can disseminate the course using several channels:

- Direct mailing list
- Newsletter
- Website
- Social networks
- Personal e-mails
- Face-to-face dissemination
- Lectures

You can find an example below:

DigProTel Professional Development for Digital Teaching and Learning (DigProTel)

Period: 2021 – 2023

Description:

The aims of the DigiTel Pro project are:

- Professional development for digital teaching and learning
- Design, developing and implementing CPD courses on respectively synchronous hybrid, blended and online teaching for anyone involved in digital course and curriculum development and for leaders steering this process.
- Optimize models, guidelines and pedagogies by top level research and innovation groups leading to mature and high quality education.
- This will accelerate the Modernization Agenda and the digital transformation of education systems across Europe, supporting ultimately the Green Deal.

The objectives of the DigiTel Pro project are:

- Explore and forecast educational needs of teaching staff and learners within and after the COVID+ era;
- Exchange expertise between researchers and innovators on synchronous hybrid, blended and online distance learning, optimizing models and guidelines for short-term and future CPD;
- Design, plan and develop continuing education courses enabling anyone involved in course and curriculum development in adapting to hybrid, blended and online distance learning;
- Organise three course cycles in a CPD programme for digital education;
- Empower student readiness for digital learning by an online course and integrating the “student voice” in all learning scenarios;
- Reinforce the ability of universities to provide high quality, inclusive and scalable digital education.

Participating Edul@b members: Albert sangrà, Dr. Monste Guilert and Dr. Juliana Raffagelli

Reference no: EU_ERASMUS+_K2_Strategic_Partnerships_COVID_20

Website: <https://digitelpro.eadtu.eu/>

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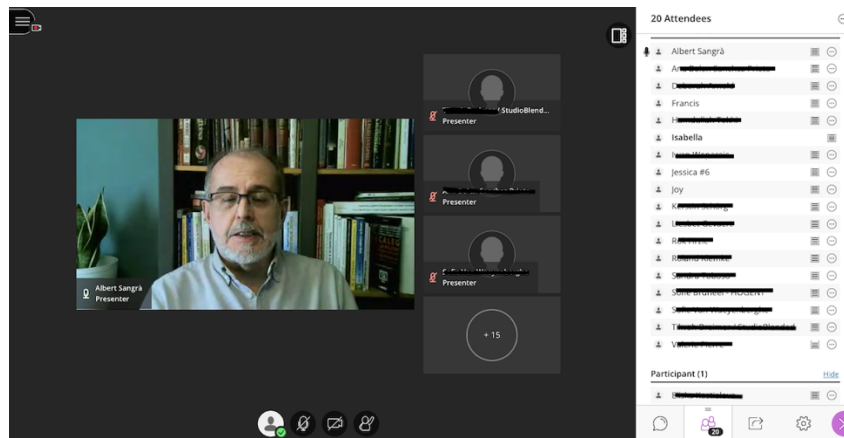
We also suggest you to create a LinkedIn group in order to publish information of the course, to collect feedback, engage new people and create a community.

Make sure that you have a registration procedure set up, well in advance for the start of the course. Before the beginning of the course an interest form or inscription form should be created. In our case the interest form was spread 3 months before the starting of the course just to have an idea of the amount of people interested, but the inscription form was circulated just 10 days before the beginning of the course in order to avoid drop off.

Tips to facilitate, dynamize and engage participants

BEFORE THE BEGINNING OF THE COURSE

We decided to start the course with a synchronous activity aim at introducing the goals of the course, knowing the participants, showing the learning environment and solving doubts. The session was recorded so people who could not attend had the possibility to watch it in a second time. One hour before the official starting of the course a reminder was sent to the participants.



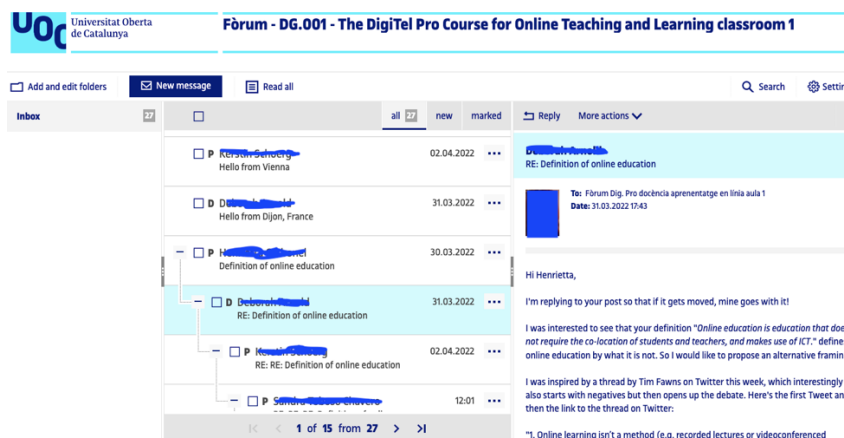
DURING THE COURSE

Establish a tutor could be extremely useful both to accompany students and resolve their doubts during the course and to avoid this task having to be carried out by professors.

Use the notice board, in case of login problem someone must be available to help participants and solve technical problems, if people do not enter to the platform send a personal e-mail.

Establish synchronous session in case you see the engagement is low.

Another important tool could be the forum. Participants can start to introduce their selves by this tool, an interesting task can be a discussion on a specific issue by means of the forum. Participants can also use this space to interchange material and ask relevant questions to their peers and professors.



AFTER THE COURSE

Participants often value a certificate of some sort. Depending on how you organise the course and assessment, you can offer a certificate of attendance indicating that somebody has attended the course and has shown some activity within the course. Or you can go to a more formal certification

if you apply a stricter assessment of the assignments or maybe even have added a formal end-of-course assessment.

Lessons learned

Lessons learned have been collected after the course taking into account the problems we had and how they could be solved and improved taking into consideration the following suggestions:

ENGAGEMENT
<ul style="list-style-type: none">• Not disseminate the registration several weeks before the beginning of the course (2 weeks before could be a good timing)• In order to engage people who are really interested in carrying out all the course, ask them to provide a motivation letter
LEARNING ENVIRONMENT
<ul style="list-style-type: none">• Provide some guidelines or tutorials related to the learning environment before the starting the course
CONTENT AND SESSIONS
<ul style="list-style-type: none">• You must be very clear regarding the modalities of the course. People who chose an online learning course usually believe they can do it at one's own pace', but that is not always the case. In our course we had deadlines and assessments every week/2 weeks• Schedule at least 2-3 synchronous sessions throughout the course, if you plan to have a 14 weeks course.• Reduce the number of activities for each module (1-2 activities)

Part B: course content

The content of each module with particular attention on the problem, learning goals, and e-tivities to be carried out by students is presented below. You are free to use the content and learning materials as is, but usually it will require some adaptation to your specific situation. Ensure that the students can relate to the course content, cases and examples given.

Module 1

Content and aims

Universitat Oberta de Catalunya

Introduction to Online Education

Universitat Oberta de Catalunya
Edu@b Research Group

www.edu@b.uoc.edu

Universitat Oberta de Catalunya

The Problem

Online Education is a fuzzy concept
(Therefore, we need to clarify it!)

Universitat Oberta de Catalunya

Universitat Oberta de Catalunya

Course Introduction

- Clarifying the Concept Online Education
- History of Online Education
- Theories and Models of Online Education
- Differences between Online and Offline Education

Universitat Oberta de Catalunya

Universitat Oberta de Catalunya

Learning Goals

What will we learn through this module? At the end of the module, you will be able to describe in your own words

- the concept of online education;
- the genealogy of online education;
- main theories and models of online education
- differences between offline and online education

Universitat Oberta de Catalunya

Universitat Oberta de Catalunya

Learning Outcomes

At the end of the module, you will be able to describe in your own words

- the concept of online education
- the genealogy of online education
- main theories and models on online education
- differences between offline and online education

Universitat Oberta de Catalunya

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Learning Activities

Universitat Oberta de Catalunya

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e-Tivity 1

Write a blogpost on Self and Topic

Description

- Introduce yourself briefly (a few sentences, a small section at most). It is not mandatory to introduce yourself.
- Draft a working definition of online education. Create a definition based on your prior knowledge. You can boost the process by first creating a mind map of characteristics (e.g., components) of online education. When drafting a definition, think of d examples in which you have participated. You may add examples to the blog post.

Resources		Interactions	
Create	A working definition of online education		Teacher support
Share	Use the LangBlog!		Teacher-Peers
Time: 2 Days Aprox. 1h			

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e-Tivity 2

Explore an Online Course

Description

Central to this e-tivity is the analysis of an online course. We focus on the course Introduction to Psychology that has already been brought to your attention. This e-tivity includes three tasks: (a) consultation of sources, (b) scoring of criteria, and (c) suggestions for improvement.

- Consult the sources that provide you with information on the course. You will find the information here.
- Score the criteria derived from the transactional distance theory and the multimodal for online education. Fill in Table 1 and 2.
- We ask you to formulate a recommendation for course improvement. Suppose that time and money are not an issue, what would you want to focus on in a redesign? Choose one component from Picciano's model. Use Moore's theory to support your improvement.

Resources		Interactions	
Create	Recommendations		Teacher support
Share	Use the LangBlog!		Teacher-Peers
Time: 7 Days Aprox. 2h			

Universitat Oberta de Catalunya

UOQ University of Ontario at Queen's **e-Tivity 3** edu @b

Shift Happens!

Description
 In this activity you will discuss challenges that relate to differences between predominantly onsite education and online education. These differences surfaced during the rapid transition from offline to online.
 • Read the article of Hodges et al. (2020) entitled "The difference between emergency remote teaching and online learning".
 • Consider the seven components of online education. Which component(s) caused problems in the transition from on campus to online? You can use the table to record your thoughts.
 • Select the component that according to you was the most problematic during and after the transition to online. In your opinion, can this problem be solved in an online educational context? Share your problem and your claim in the discussion forum. Substantiate views based on the article by Hodges et al. (2020).

Resources	Interactions
	Teacher support
	Teacher-Peers
	Self-guided

Time: 5 Days Approx. 2h. 9



Material and resources

E-tivity 1 (M1):

- Introduce yourself briefly (a few sentences, a small section at most). It is not mandatory to introduce yourself.
- Draft a working definition of online education. Create a description based on your prior knowledge. You can boost the process by first creating a mind map of characteristics (e.g., components) of online education. When drafting a definition, think of d examples in which you have participated. You may add examples to the blog post.

Material and resources (e-tivity 1):

- Wopereis, I. (2022) *Introduction to online education. Module 1 Introduction to online education of the DigiTel Pro course Online.* Lesson https://zenodo.org/record/7660350#.Y_SdTeyCFQI (Digitel Pro- Online Teaching and learning Zenodo Repository).

E-tivity 2 (M1):

Central to this e-tivity is the analysis of an online course. We focus on the course Introduction to Psychology that has already been brought to your attention. This e-tivity includes three tasks: (a) consultation of sources, (b) scoring of criteria, and (c) suggestions for improvement.

- Consult the sources that provide you with information on the course. You will find the information here. https://zenodo.org/record/7660350#.Y_SdTeyCFQI
- Score the criteria derived from the transactional distance theory and the multimodal for online education. Fill in Table 1 and 2. https://zenodo.org/record/7660350#.Y_SdTeyCFQI
- We ask you to formulate a recommendation for course improvement. Suppose that time and money are not an issue, what would you want to focus on in a redesign? Choose one component from Picciano's model. Use Moore's theory to support your improvement.

Material and resources (e-tivity 2):

- Wopereis, I. (2022) *Introduction to online education. Module 1 Introduction to online education of the DigiTel Pro course Online.* Lesson https://zenodo.org/record/7660350#.Y_SdTeyCFQI

E-tivity 3 (M1):

In this e-tivity you will discuss challenges that relate to differences between predominantly onsite education and online education. These differences surfaced during the rapid transition from offline to online.

- Read the article of Hodges et al. (2020) entitled ‘The difference between emergency remote teaching and online learning’.
- Consider the seven components of online education. Which component(s) caused problems in the transition from on campus to online? You can use the table to record your thoughts.
- Select the component that according to you was the most problematic during and after the transition to online. In your opinion, can this problem be solved in an online educational context? Share your problem and your claim in the discussion forum. Substantiate views based on the article by Hodges et al. (2020).

Material and resources (e-tivity 3):

- Wopereis, I. (2022) *Introduction to online education. Module 1 Introduction to online education of the DigiTel Pro course Online*. Lesson https://zenodo.org/record/7660350#.Y_SdTeyCFQI (DigiTel Pro- Online Teaching and learning Zenodo Repository).
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020, March 27). *The difference between emergency remote teaching and online learning*. Educause Review. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>

Additional resources:

- Hummel, H. G. K., Nadolski, R. J., Eshuis, J., Slootmaker, A., & Storm, J. (2021). Serious game in introductory psychology for professional awareness: Optimal learner control and authenticity. *British Journal of Education Technology*. vol 52.
- Martin, F., Polly, D., & Ritzhaupt, A. (2020, September 8). Bichronous online learning: Blending asynchronous and synchronous online learning. *Educause Review*.
- Otter, H. (2021). *Good practices for lecturers* focused on educational innovation with ICT: Serious game psychology ‘Practice taster’. Utrecht, the Netherlands: Acceleration Plan Educational Innovation with IT. <https://www.versnellingsplan.nl/wp-content/uploads/2022/01/Serious-game-psychology-good-practice.pdf>
- Sangrà, A., Vlachopoulos, D., & Cabrera, N. (2012). Building an inclusive definition of e-learning: An approach to the conceptual framework. *The International Review of Research in Open and Distributed Learning*, 13(2), 145-159. <https://doi.org/10.19173/irrodl.v13i2.1161>
- Weller, M. (2020). *25 years of ed tech*. Edmonton, Canada: AU Press.
- Wiley, D. (2013, October 21). *What is Open Pedagogy? Improving Learning*. <https://opencontent.org/blog/archives/2975>
- The Quality Assurance Agency for Higher Education (2020). *Building a taxonomy for digital learning* [report]. <https://www.qaa.ac.uk/docs/qaa/guidance/building-a-taxonomy-for-digital-learning.pdf>

Role of the teacher in online education

Universitat Oberta de Catalunya
Edu@b Research Group

The Problem

Students might be disoriented about their personal learning process, setting unrealistic learning goals in a context of self-development

Learning Goals

What will we learn through this module?

- Understanding the role of the teacher as key support for the student to set and achieve appropriate personal learning goals as part of nurturing a learning ecology.
- Exploring how the teacher can contribute to develop the students' learning ecologies, based on self-regulation and self-care.
- Understanding how advanced digital technologies can enhance the teacher's intervention.
- Understanding how to self-develop professional learning around teaching and learning, through the lens of lifelong learning ecologies

Learning Outcomes

- Formulating a reflection on the role of the teacher to support the students' development of learning ecologies as part of an independent learning process.
- Being able of identifying and using basic learning analytics tools informing the teacher's intervention.
- Becoming aware of the self-developed professional learning ecology.

Learning Activities

e-Tivity 1

Online discussion on the role of the teacher in the digital era

Description			
Use the Video Resource below to analyse the online teacher' role. Take part in a guided discussion with your peers about pros & cons of online teacher' role			
Resources		Interactions	
Knowing	Video	Reading	Teacher support
Engage	Guide for online Discussion		Teacher-Peers
Evaluate	Rate peer comments		Self-guided
Time: 6 Days Aprox. 1 h. 45 min			

e-Tivity 2

A critical approach using basic learning analytics tools

Description			
Use the presentation to analyse the use of learning analytics as a tool to inform teacher intervention			
Resources		Interactions	
Analyse	Presentation	Reading	Teacher support
Share	Use the LangBlog!		Teacher-Peers
Time: 5 Days Aprox. 1h 30 min			

e-Tivity 3

Mapping my learning ecology

Description			
Create a map of the learning ecology based on the previously acquired concepts and on the guide presented			
Resources		Interactions	
Engage & Evaluate	Template to develop a conceptual map		Self-guided
Reflect & Evaluate	Self-Assessment Rubric		Self-guided
Time: 6 Days Aprox. 1h 45 min			

Material and resources

E-tivity 1(M2):

Students can consider the resources provided, but also, ask questions, share experiences, introduce cases or other resources they know well: the idea here is to come up with some relevant reflections about the role of the teacher, particularly in the pandemic aftermath.

- Take part in a guided discussion with your peers about pros & cons of online teacher' role

Material and resources (e-tivity 1-M2):

- Garcia Gil, E. Guitert Catasús, M., Romeu Fontanillas, T. (2019). *Guidelines on virtual debates*, Barcelona: UOC. <https://openaccess.uoc.edu/handle/10609/137327>
- Guitert Catasús, M., Romeu Fontanillas, T. (2020). *Strategies for online teaching*, Barcelona: UOC. <https://zenodo.org/record/7624616#.Y-y14-yCFQI> (Digitel Pro- Online Teaching and learning Zenodo Repository).

E-tivity 2 (M2):

This is an activity that takes us from the initial debates in the 90s and 2000 on the potential of online learning to support social learning (and hence to learn effectively, by making deep connections) to more recent debates. Indeed, the teacher will face nowadays an amazing abundance of materials and increasing spaces for communication. Here are some of the questions that we will explore with this eTivity: How can the teacher enhance the abundant digital information produced to stay informed about their learners progress? How can the learners stay informed about their own progress? Can we use the data generated in online learning environments for the purposes above? Which are the limitations? Indeed, our learning goal will be to analyse the adoption of learning analytics as a tool to inform the teacher intervention and hence, to reflect about your own online teaching practice or a case of your choice, with (ideally) the help of your colleagues.

- Take a look at the materials, think about your online teaching practice, or search for a website of any higher education institution you would like to explore. Consider: The presence/absence of learning analytics policies and models to support the appropriate and ethical usage of students' data, to inform the teacher, the utility of any eventual existing model you could find out or you are aware of about the chosen case, the actual usage of such tools, the debate and concerns about data usage.
- Elaborate a video presentation of 3-5 minutes introducing your case (self-case or other case). You can directly record yourself or produce any other form of video and upload it. If possible, we will engage with other peers' videos and comment on several cases. You can use the rubric for self and peer evaluation.

Material and resources (e-tivity 2-M2):

- Raffaghelli, J.E., Manca, S., Stewart, B. *et al.* Supporting the development of critical data literacies in higher education: building blocks for fair data cultures in society. *Int J Educ Technol High Educ* 17, 58 (2020). <https://doi.org/10.1186/s41239-020-00235-w>
- Raffaghelli J.E. (2021) *Learning analytics: a dark continent? Open educational resource for the Digital project*. Barcelona: Edul@b Research Group <https://zenodo.org/record/7642714#.Y-yn1uyCFQY> (Digitel Pro- Online Teaching and learning Zenodo Repository).
- Raffaghelli, J.E., Guitert, M., Riccò, I. (2022) *Rubric to analyse projects introducing data-driven practices and learning analytics within the class*. *Teaching Resource*. Edul@b Research Group <https://zenodo.org/record/7643056#.Y-zDj-yCFQI> (Digitel Pro- Online Teaching and learning Zenodo Repository).

E-tivity 3 (M2):

- The objective is to create a map of the learning ecology based on the previously acquired concepts and on the guide presented

To accomplish this task, students will first need to watch the video entitled "[Learning ecologies as a strategic approach to the development of Critical Digital Literacies \(video\)](#)" by Albert Sangrà, afterwards they have to use the document "Mapping-my-learning ecology" that will guide students to make the map of their learning ecology tackling the following items:

My past experience and current knowledge [IDENTITY]

My institutional context [CONTEXT]

The trends in my professional community [CONTEXT]

My colleagues' opinion & practices [RELATIONSHIPS]

My professional development opportunities & constrains [RELATIONSHIPS]

My available resources [RESOURCES]

The tools I use and the tools I could use [RESOURCES]

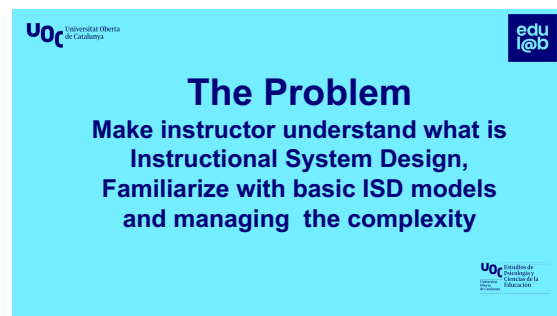
What I'm doing [ACTIVITIES]

Once the activity has been carried out, you can do a self-assessment using the rubric that you find below the description of the module.

Material and resources (e-tivity 3-M2):

- Sangrà A. (2021) *Learning ecologies as a strategic approach to the development of Critical Digital Literacies*. UOC youtube: https://www.youtube.com/watch?v=daCG11DPtmM&t=104s&ab_channel=EdulabUOC
- Raffaghelli, J.E., Guitert, M., Riccò, I. (2022) *Rubric to self-assess the learning ecology of students*. Teaching Resource. Edul@b Research Group <https://zenodo.org/record/7643106#.Y-zHr-yCFQI> (Digital Pro- Online Teaching and learning Zenodo Repository).

Module 3



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Course Introduction


- Introduction to Instructional System Design (ISD)
- The Power Of AGILE Instructional Design Approach
- The Common Types of Instructional Design
- The instructional designer responsibilities

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Learning Goals

What will we learn through this module?




- Understanding what is Instructional System Design
- Familiarizing with basic ISD models: ADDIE meta-model
- Understanding the complexity: learners' background, expectations, individual differences

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Learning Outcomes

- Improved understanding of how to create a course design and develop all instructional materials, including presentation materials, participant guides, handouts, and job aids or other materials.
- Instructional designers more responsible for the complexity about learners' background, expectations, individual differences



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Learning Activities


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e-Tivity 1

Synthesis and summary

Description
Use the Resource below to learn what is instructional system design (ISD), how using the ADDIE model and how to manage the complexity: learners' background, expectations, individual differences. Draw a conceptual map.

Resources		Interactions
Knowing	Reading 	Teacher support
Engage	Reading	Self-guided
Complete	Drawing a conceptual map	

Time: 5 Days Aprox 1 h



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e-Tivity 2

Comparing Approaches

Description
Use a template to compare and analyse different types of learning designs.

Resources		Interactions
Engage	Case studies with different learning design 	Teacher support
Complete	Template for comparison 	Teacher-Peers

Time: 3 Days Aprox. 45 min




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e-Tivity 3

Critical analysis

Description
Analyse two readings and make a critical analysis in order to demonstrate your understanding of the course topics.

Resources		Interactions
Engage & Evaluate	Two readings  	Teacher support
Reflect & Evaluate	Critical Analysis Template 	Self-guided

Time: 2 Days Aprox. 30 min

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E-tivity 1(M3):

In this module you have to complete at least one of the three activities:

- Use the Resource “Examples of instructional design for social studies according to meaningful learning and information processing theories” to learn what is instructional system design (ISD), how using the ADDIE model and how to manage the complexity: learners' background, expectations, individual differences. The output is a conceptual map (in doc, pdf or jpg, as you prefer).

Material and resources (e-tivity 1-M3)

- Babadogan, & Ünal, F. (2011). Examples of instructional design for social studies according to meaningful learning and information processing theories. *Procedia - Social and Behavioral Sciences*, 15, 2155–2158. <https://doi.org/10.1016/j.sbspro.2011.04.070>
- Bates, A.W. (2015) *Teaching in a Digital Age: Guidelines for Designing Teaching and Learning*. Vancouver BC: Tony Bates Associates Ltd. <https://pressbooks.bccampus.ca/teachinginadigitalagev2/>

E-tivity 2(M3):

- Use the case study template to compare and analyse different types of learning designs. The output is the filled template.

Material and resources (e-tivity 2-M3):

- Di Pomponio I.(2022) *Case Study Template. Professional Development for Digital Teaching and Learning. Teaching Resource.* https://zenodo.org/record/7680208#.Y_xpOuyCFQI (Digitel Pro- Online Teaching and learning Zenodo Repository).

E-tivity 3(M3):

- Analyse two readings: “Designing for Engagement: Using the ADDIE Model to Integrate High-Impact Practices into an Online Information Literacy Course” and "The Development of an Instructional Design Model on Facebook Based Collaborative Learning to Enhance EFL Students’ Writing Skills” and make a critical analysis in order to demonstrate your understanding of the course topics.
- Use the Critical Analysis Template to complete the task.

Material and resources (e-tivity 3-M3):

- Nichols Hess, & Greer, K. (2016). Designing for Engagement: Using the ADDIE Model to Integrate High-Impact Practices into an Online Information Literacy Course. *Communications in Information Literacy*, 10(2), 264–282. <https://doi.org/10.15760/comminfolit.2016.10.2.27>
- Linh, & Suppasetsee, S. (2016). The Development of an Instructional Design Model on Facebook Based Collaborative Learning to Enhance EFL Students’ Writing Skills. *IAFOR Journal of Language Learning*, 2(1), 48–66. <https://doi.org/10.22492/ijll.2.1.04>
- Di Pomponio I. (2022) Critical analysis template Professional Development for Digital Teaching and Learning. Teaching Resource. https://zenodo.org/record/7680220#.Y_xqDeyCFQI (Digitel Pro- Online Teaching and learning Zenodo Repository).

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Orchestrating the online collaborative Classroom

edu@b Universitat Oberta de Catalunya ·Edu@b Research Group

www.edu@b.uoc.edu

UOC Universitat Oberta de Catalunya

The Problem

How do we orchestrate our online collaborative classroom in times of change, digital innovation and uncertainty?

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Course Introduction

- Modernisation of Higher Education
- Massification of Higher Education
- Pandemic Pedagogy
- Intensification of pre-existing problems in teaching and learning in HEIs
- Relevance of a strategic orchestration
- Focus on interaction and collaboration

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Learning Goals

What will we learn through this module?




- Understanding the principles of Communicative and collaborative interaction
- Achieving strategies to implement guidance, coaching and tutoring across several process of active learning
- Achieving strategies to promote motivation and engagement
- Understanding the strategies to adopt data-driven tools to analyse ongoing

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Learning Outcomes

- Improved understanding of what it takes to organise, coordinate, implement and monitor learning activities in an online activity
- A design-idea for orchestrating a collaborative online learning activity



5

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Learning Activities

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e-Tivity 1

Debate on the pros&cons of collaborative learning

Description	
Use the Video Resource below to analyse how collaborative learning can be orchestrated Take part in a guided debate with your peers about pros & cons of collaborative learning	
Resources	Interactions
Knowing	Teacher support
Engage	Teacher-Peers
Evaluate	Self-guided
Time: 5 Days Aprox. 1,5 h.	

7



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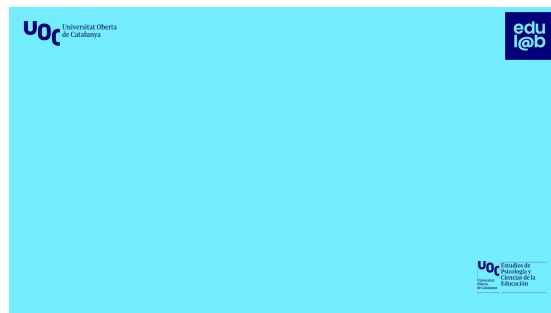
e-Tivity 2

A design-idea for collaborative learning activity

Description	
Use a template triggering design-thinking (considering: large size lectures, difficult content, low students' academic maturity, data management, etc.) to produce your design-idea	
Resources	Interactions
Create	Teacher support
Share	Teacher-Peers
Time: 7 Days Aprox. 2h	

8

e-Tivity 3		edu l@b	
Self and Peer-Assessment			
Description Take a look at other peers' videopresentation and share a constructive comment to improve their work. After this exercise, use the rubric to self-assess your work.			
Resources		Interactions	
Engage & Evaluate	LangBlog to comment your peers' work		Peers
Reflect & Evaluate	Self-Assessment Rubric		Self-guided
Time: 4 Days Aprox. 1,5h			



E-tivity 1 (M4):

- Once watched the video resourced on Collaborative Learning, take part in a guided debate with your peers about pros & cons of collaborative learning.

Material and resources (e-tivity 1-M4):

- Sangrà A., Govender S., Guitert M. (2021) *IAU-UOC series Chapter 5: Interaction and collaboration: being social in digital environments*. Webinar, 30 September 2021, UOC. https://www.youtube.com/watch?v=ij2faJeIs2Q&ab_channel=UOCUniversitatObertadeCatalunya (minute 27 to 47).
- Garcia Gil, E. Guitert Catasús, M., Romeu Fontanillas, T. (2019). *Guidelines on virtual debates*, Barcelona: UOC. <https://openaccess.uoc.edu/handle/10609/137327>

E-tivity 2(M4):

- Design-idea for collaborative learning activity. The idea must respond to how you will orchestrate a virtual session based on the design of a collaborative activity that you have already carried out in another context or that you would like to do. For example, you should take into account: the number of students, the level of collaboration you want to establish, the dynamic between students, what will be your role as teacher in the development of the activity, what feedback will you give to your students. The task can be sent as a video, ppt or text document.
- Take part into the discussion (in the debate space) in order to share your concerns and to create a collaborative interaction.

Material and resources (e-tivity 2-M4):

- Guitert Catasús, M., Romeu Fontanillas, T. (2020). *Strategies for online teaching*, Barcelona: UOC. <https://zenodo.org/record/7624616#.Y-yl4-yCFQI> (DigiTeL Pro- Online Teaching and learning Zenodo Repository).
- Guitert, M. Romeu, T & Romero M. (2021) *Design and strategies for collaboration in online scenarios* UOC. <http://hdl.handle.net/10609/137366>

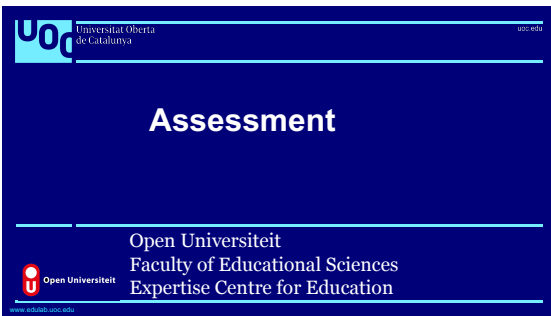
E-tivity 3(M4):

- Take a look at peers videopresentation and shared a constructive comment to improve their work. After this exercise use the rubric to assess your work.

Material and resources (e-tivity 3-M4):

- Raffaghelli, J.E., Guitert, M., Riccò, I. (2022) *Rubric to analyse projects introducing data-driven practices and learning analytics within the class. Teaching Resource*. Edul@b Research Group <https://zenodo.org/record/7643056#.Y-zDj-yCFQI> (Digitel Pro- Online Teaching and learning Zenodo Repository).

Module 5

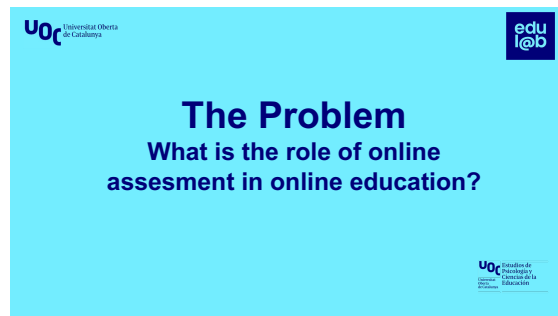


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Assessment

Open Universiteit
Faculty of Educational Sciences
Expertise Centre for Education

www.oddbb.uoc.edu

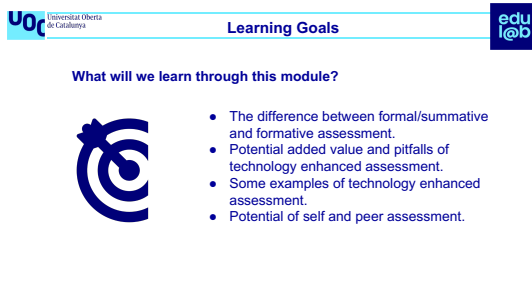


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The Problem

What is the role of online assesment in online education?


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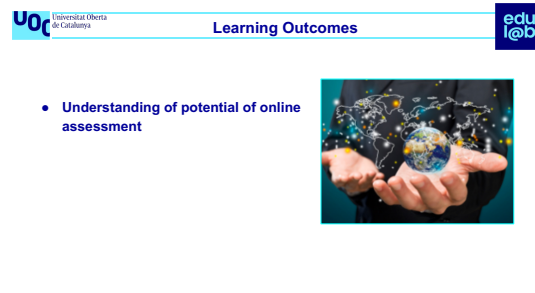
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Learning Goals

What will we learn through this module?




- The difference between formal/summative and formative assessment.
- Potential added value and pitfalls of technology enhanced assessment.
- Some examples of technology enhanced assessment.
- Potential of self and peer assessment.



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Learning Outcomes

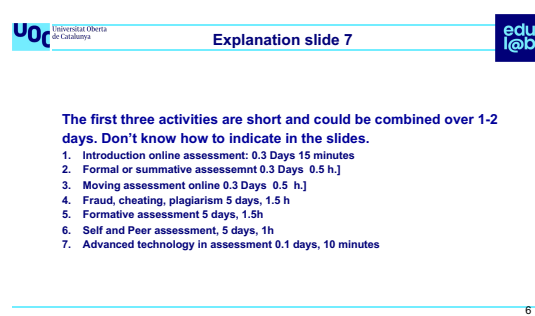
- Understanding of potential of online assesment




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Learning Activity

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Explanation slide 7

The first three activities are short and could be combined over 1-2 days. Don't know how to indicate in the slides.

1. Introduction online assesment: 0.3 Days 15 minutes
2. Formal or summative assesment 0.3 Days 0.5 h.]
3. Moving assesment online 0.3 Days 0.5 h.]
4. Fraud, cheating, plagiarism 5 days, 1.5 h
5. Formative assesment 5 days, 1.5h
6. Self and Peer assesment, 5 days, 1h
7. Advanced technology in assesment 0.1 days, 10 minutes

e-Tivity 1
Introduction online assessment

Description
Introduction into the module and online assessment

Resources		Interactions
Knowing	Reading intro into module, Reading explanation of technology enhanced assessment	Student-content
Engage	Introduction message Read Case introduction to psychology	Student student Student content
Engage	Read blogpost and formative/summative assessment, answer questions, take notes	Student content
Engage	Explore website Engage in assessment, answer questions, take note, discuss in discussion forum	Student content, student student

[Time: 0.5 Days 0.5 h.]

e-Tivity 2
Formal or summative assessment

Description
Brief description of formal assessment, concepts validity, transparency, efficiency, reliability

Resources		Interactions
Knowing	Reading	Student-content
Engage	Exploring concepts validity, transparency, efficiency, reliability, answer questions, take notes	Student-student

[Time: 0.5 Days 0.5 h.]

e-Tivity 3
Moving assessment online

Description
Brief description issues involved when moving to online assessment, brief examples (multiple choice and itembanks), online proctoring, technologies for authentication and authorship

Resources		Interactions
Knowing	Reading	Student-content
Create		
Engage	Relate to own context, answer questions	Student content
Evaluate		

[Time: .0.5 Days 0.5 h.]

e-Tivity 4
Fraud, cheating, plagiarism

Description
Short introduction into fraud and plagiarism, technology for authentication and authorship, relation to privacy of data and GDPR

Resources		Interactions
Knowing	Reading, watching videos, exploring websites	Student-content
Create		
Engage	3 assignments, relate to own situation, answer questions, suggest application in own situation, discuss in forum, reply to others	Student-content Student-student
Evaluate		

[Time: 5 Days 2 h.]

e-Tivity 5
Formative assessment

Description
Introduction into formative assessment

Resources		Interactions
Knowing	Reading , watching video	Student-content
Create		
Engage	2 assignments, answer questions, Relate to own situation, how to apply, discuss with others	Student-content Student-student
Evaluate		

[Time: 5 Days 1.5 h.]

e-Tivity 6
Self and Peer assessment

Description
Introduction self and peer assessment

Resources		Interactions
Knowing	Reading	Student-content
Create	Watch video and draw up required activities and phases	Student-content
Engage	Relate to own situation, how to apply, discuss with others	Student-student
Evaluate		

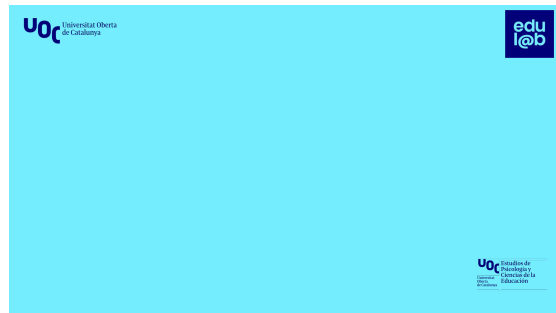
[Time: 2 Days 1 h.]

e-Tivity 7
Advanced technology in assessment

Description
Very brief mention of advanced technologies, one example, referring to last module

Resources		Interactions
Knowing	Reading	Student-content
Create		Student-content
Engage		Student-student
Evaluate		

[Time: 0.1 Days 10 minutes]



All the e-tivities are explained in details on the Module 5 Online Assessment guidelines.

E-tivity 1(M5):

- The assignment about online assessment.

E-tivity 2(M5):

- The assignment about the e-learning framework in the Authentication and authorship verification in online assessment section.

E-tivity 3(M5):

- The assignment about practice test.

Material and resources (e-tivity 1,2,3-M5):

- Brouns, F. (2022) Online assessment. *Online assessment of the DigiTel Pro course Online. Education. Lessons* https://zenodo.org/record/7660411#.Y_Sf5-yCFQY (DigiTel Pro-Online Teaching and learning Zenodo Repository).
- AppalachiaRCC. (2016, October 16). *Peer assessment* [Video]. Youtube. <https://youtu.be/i-HQptt-RtA>
- *Automated essay scoring*. (2021, October 11). In Wikipedia. https://en.wikipedia.org/w/index.php?title=Automated_essay_scoring&oldid=1049359510
- Bellinga, P. (n.d.). The benefits of blending formative and summative assessment. How auto-grading helps you increase the number of assessments in your education. *Grasple Blog*. <https://www.grasple.com/blog/the-benefits-of-blending-formative-and-summative-assessment/>
- Cambridge University Press & Assessment. (n.d.). Peer. In *English dictionary*. Retrieved January 10, 2022, from <https://dictionary.cambridge.org/dictionary/english/peer>
- Grasple. (n.d.). *Help your students learn by doing*. Retrieved January 21, 2022, from <https://www.grasple.com/product>
- Janssen, J. P. W., Guerrero Roldan, A., Hermans, H. J. H., & Noguera, I. (2019). *TeSLA e-Assessment model & framework*. TeSLA. <https://research.ou.nl/en/publications/tesla-e-assessment-model-amp-framework>
- Merriam-Webster. (n.d.). Peer. In *Merriam-Webster.com dictionary*. Retrieved January 10, 2022, from <https://www.merriam-webster.com/dictionary/peer>
- Multiple choice. (2021, 13 December). In Wikipedia. https://en.wikipedia.org/w/index.php?title=Multiple_choice&oldid=1060110168
- Open Universiteit. (2020). *Formatief toetsen in online onderwijs* [Formative assessment in online education] [Video]. <https://player.ou.nl/wowzaportlets/embed?playlist=yDC1M4n>
- Technology-enhanced assessment. (2019, 8 March). In *EduTechWiki*. http://edutechwiki.unige.ch/mediawiki/index.php?title=Technology-enhanced_assessment&oldid=70748
- TeSLA project EU. (2017). *TeSLA* [Video]. Vimeo. <https://vimeo.com/164100812>
- TU Delft. (n.d.). *Fraud & plagiarism*. Retrieved January 21, 2022, from <https://www.tudelft.nl/en/student/legal-position/fraud-plagiarism>
- University of Reading. (n.d.). *Engage in assessment. Introducing technology enhanced assessment*. Retrieved January 27, 2022, from <https://www.reading.ac.uk/engageinassessment/using-technology/eia-introducing-technology-enhanced-assessment.aspx>
- University of Twente. (2021, March 15). *Choosing remote assessment method and tool*. <https://www.utwente.nl/en/telt/online-lectures/remote-assessment/choosing-remote-assessment/>

- Veugen, M. J., Gulikers, J. T. M., & den Brok, P. (2021). We agree on what we see: Teacher and student perceptions of formative assessment practice. *Studies in Educational Evaluation*, 70, 101027. <https://doi.org/10.1016/j.stueduc.2021.101027>
- Whitelock, D. (2019, May 17). *Giving and receiving feedback. How does it work for digital assessment?* (Conference presentation). Opleiding Onderwijswetenschappen Conferentie e-assessment. <https://player.ou.nl/wowzaportlets/embed?production=ynCB9Pq>

Module 6

UOC Universitat Oberta de Catalunya

XR and learning models

edu@b Universitat Oberta de Catalunya
-Edu@b Research Group

www.ou@b.uoc.edu

UOC Universitat Oberta de Catalunya

The Problem

eXtended Reality technologies introduce instructors to critical challenges that need to be tackled, and novel learning opportunities to be exploited in learning scenarios.

UOC Facultat de Psicologia i Ciències de l'Educació

UOC Universitat Oberta de Catalunya

Course Introduction

- Introduction to XR in Experiential Education: why, when, how?
- Extended reality: the operational definition
- Main features, opportunities and drawbacks in Education
- XR Learning models


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Learning Goals

What will we learn through this module?

- Introduce XR in Experiential Education
- Describe the potential of Extended reality in learning
- Discuss main features, opportunities and drawbacks of XR in Education




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Learning Outcomes

Support learners to:

- Understand their needs, and self-awareness of their condition, abilities, limitations, and expectations for XR learning.
- Master their own personal resources in order to maintain autonomy and accountability in XR learning.
- Enhance social interactions by integrating a multiplexed design-driven and user-centred approach for XR learning



UNIVERSITÀ TELEMATICA INTERNAZIONALE LINNETTUNO

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Learning Activities

UOC Facultat de Psicologia i Ciències de l'Educació

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e-Tivity 1

XR in Experiential Education

Description
Use the Video lesson below to learn how to design and promote active learning and the creation of meaningfully rich experiences by enabling learners' awareness and competences to XR learning.

Resources		Interactions	
Knowing	Video (min 30)	Presentation	Teacher support
Engage	Slides		Self-guided

Time: 3 Days 45 min

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e-Tivity 2

Critical analysis on two readings

Description
Reading two essays that present theoretical and methodological XR learning and user experience issues. The objective of the e-Tivity is to analyse, comment and draw conclusions from the readings.

Resources		Interactions	
Engage	XR learning essays		Teacher support
Complete	Template for paper analysis		Teacher-Peers

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e-Tivity 3

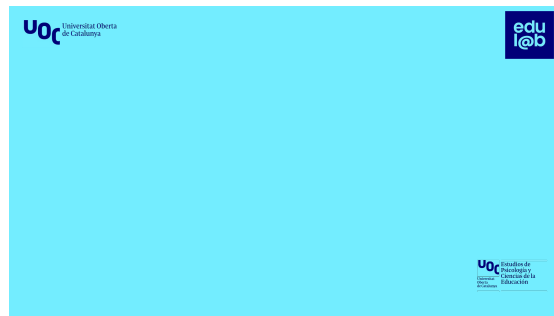
Inspirational video on empathy in XR

Description
View the video and stimulate the reflection on VR and empathy.

Resources		Interactions	
Engage	Inspirational video		Teacher support
Reflect & Evaluate	Self-Assessment questionnaire		Self-guided

Time: 2 Days Aprox. 30 min

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E-tivity 1(M6):

- Watch the "Extended Reality and Learning Models" Video lesson that you may find in the learning environment.

Material and resources (e-tivity 1-M6):

- The video lesson from UNINETTUNO is not available but you can use other material in open access or create your own video lesson.

E-tivity 2(M6):

- Analyse two readings: "User Experience in Collaborative Extended Reality: Overview Study" and "Full-immersion virtual reality for experiential education: An exploratory user experience analysis" in order to make a critical analysis in order to demonstrate your understanding of the course topics. Use the critical analysis template to complete the task.

Material and resources (e-tivity 2-M6):

- Pollini A. (2022) *Critical analysis template Professional Development for Digital Teaching and Learning. Teaching Resource.* https://zenodo.org/record/7680237#.Y_xs8-yCFQI (DigiTel Pro- Online Teaching and learning Zenodo Repository).
- Christian Schott, Stephen Marshall (2021) *Full-immersion virtual reality for experiential education: An exploratory user experience analysis* https://openaccess.wgtn.ac.nz/articles/journal_contribution/Full-

[immersion_virtual_reality_for_experiential_education_An_exploratory_user_experience_analysis/13166573](https://www.researchgate.net/publication/346486961_User_Experience_in_Collaborative_Extended_Reality_Overview_Study)

- Huyen Nguyen, Tomasz Bednarz (2020) *User Experience in Collaborative Extended Reality: Overview Study*.
https://www.researchgate.net/publication/346486961_User_Experience_in_Collaborative_Extended_Reality_Overview_Study

E-tivity 3(M6):

- Watch the video "How virtual reality can create the ultimate empathy machine" and stimulate the reflection on VR and empathy.

Material and resources (e-tivity 2-M6):

- *How virtual reality can create the ultimate empathy machine*
https://www.ted.com/talks/chris_milk_how_virtual_reality_can_create_the_ultimate_empathy_machine
- Pammer-Schindler, V., Klemke, R. (2022). *AI in Education. Part of module 6 Understanding innovation & key emerging technologies of the Digital Pro course Online Education*. Lesson https://zenodo.org/record/7660455#.Y_SiZeyCFQY (Digital Pro Zenodo Repository)
- Klemke, R., Brouns, F. (2022) *Artificial intelligence in and for education. Part of module 6 Understanding innovation & key emerging technologies of the DigiTel Pro course Online Education*. https://zenodo.org/record/7660478#.Y_SjneyCFQY (Digital Pro Zenodo Repository)

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