

The Key To Global Life, Digital Change Of Nature

This project establish coordination and synergy in institutions in the fields of climate-friendly technologies, cleaner production technologies and energy efficiency, renewable energy and other energy technologies. We want to develop STEM, E-content and 3D Virtual reality activities and educational programs.



ERASMUS 1st Training Meeting - The Key Global Life, Digital Change of Nature



7 to 12 March 2022
Lusofona University
LISBON, PORTUGAL



faculdade
de engenharia

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Digital Academy Coordinator, Teacher,
Marketer, Project Manager, Web
Designer and much more :-)



Lusófona X - Course creation general guidelines

Think before act!

- When designing online courses or programs, technology should not be the driving factor;
 - the course objectives and learner needs should drive the design, not the apposite;
 - After goals and objectives set, we should find technology able to support the teaching and learning path
- Pace of the course
 - Instructor-based
 - Self-paced learning

Lusófona X - Course creation general guidelines

Think before you act!

- Course presentation
 - Introduction
 - Goals
 - Resume
 - Requisites
 - Assessments
 - Duration
 - Weekly Expected effort
 - Expected outcomes (course and units)
 - What's next???
- <https://cursos.lusofona-x.pt/courses/course-v1:LusofonaX+DREAM+00/about>

Lusófona X - Course creation general guidelines

Instructor-based

- How much time is needed to accomplish the course?
- Same calendar for all
 - Drop-out (?)
- Exercises in real time (ORA assessments)
- Time pressure
 - It's good?
 - It's bad?
- Social presence clues
 - Support through fóruns
- Possibility of synchronous online activities

Lusófona X - Course creation general guidelines

Self-paced

- How much time is needed to accomplish the course?
- Different course design approaches
 - Drop-out (?)
- Exercises in real time (**ORA - Open Response Assignments**) - **not possible**
- Less Time pressure
 - It's good?
 - It's bad?
- Less social presence clues
 - Support through fóruns
- No Possibility of synchronous online activities

Audience - Who is this course designed for?

- **Digital literacy**

- “the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills”
- Take into account expected different levels of knowledge and digital literacy among your students
 - It is very easy for a student to feel alone online. Where to go to get help
 - Peers ?
 - Fóruns ?
 - Course team Email ?
 - How to deal with this kind of concerns in self-paced courses?

Activities- What elements should be included?

- **Course activities**
 - Vídeos
 - Texts
 - Handouts
 - Foruns (team to deal with that??)
 - Quizzes
 - ORA
 - Synchronous online sessions (team effort) ???
 - others.....

Course Certificates

- **Certificates**
 - Audit vs Honor
 - Threshold (passing grades)
 - Self certificates or not?

How to structure a course ?

Exercise ?

How to structure a course ?

Let's think of a topic !

A general or specific one

How to structure a course ?

**Let's pretend a
course to teach it**

How to structure a course ?

To whom?

How to structure a course ?

With what goals?

How to structure a course ?

Define learning objectives

How to structure a course ?

**Let's divide topics /
knowledge in small parts**

How to structure a course ?

**Let's think of each small
part as pieces of
information (knowledge?)**

Introduction to Memory



When I look back on my childhood or I remember some words from Spanish, or Russian,

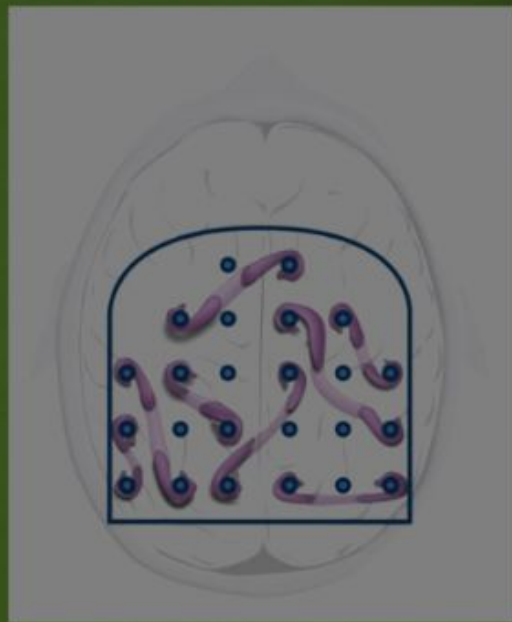
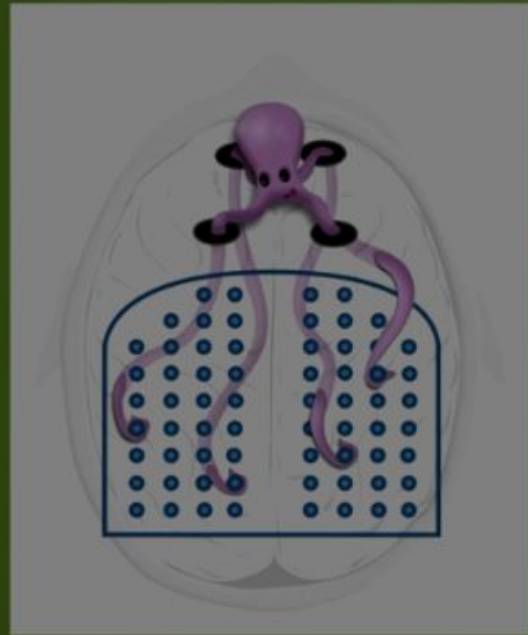
**HOW CAN WE MOVE INFORMATION
ABOUT CLIMATE CHANGE OR
ENERGY EFFICIENCY INTO PEOPLE'S
LONG-TERM MEMORY?**

How to structure a course ?

CHUNKS ?

<http://augmentingcognition.com/assets/Simon1974.pdf>

What is a Chunk?



How to structure a course ?

Assess it

How to structure a course ?

- How much time should a student spend in this exercise?
- Reading time
- Learning time
- Incorporate knowledge (repetition...)
- Act on knowledge
- New connections
- New practices
- Change

Sir Ken Robinson | TED2006

Do schools kill creativity?



SIRKENROBINSON



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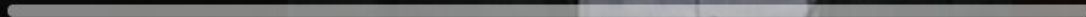
Add to list



Like



Recommend



19:12



Courses

- **[edX] - edX101: Overview of Creating an edX Course**

<https://www.edx.org/course/edx101-overview-of-creating-an-edx-course>

- **[edX] - Designing and Developing an Online Course**

<https://learning.edx.org/course/course-v1:UBCx+TEACH1.2X+3T2020/home>

- **[edX] - Foundations for Excellence in Teaching Online**

<https://learning.edx.org/course/course-v1:ASUx+FETO101x+2T2020/home>

Courses

- **[Coursera] Learning How to Learn: Powerful mental tools to help you master tough subjects**

<https://www.coursera.org/learn/learning-how-to-learn>

Build and grow your successful online learning initiative with the Open edX[®] platform

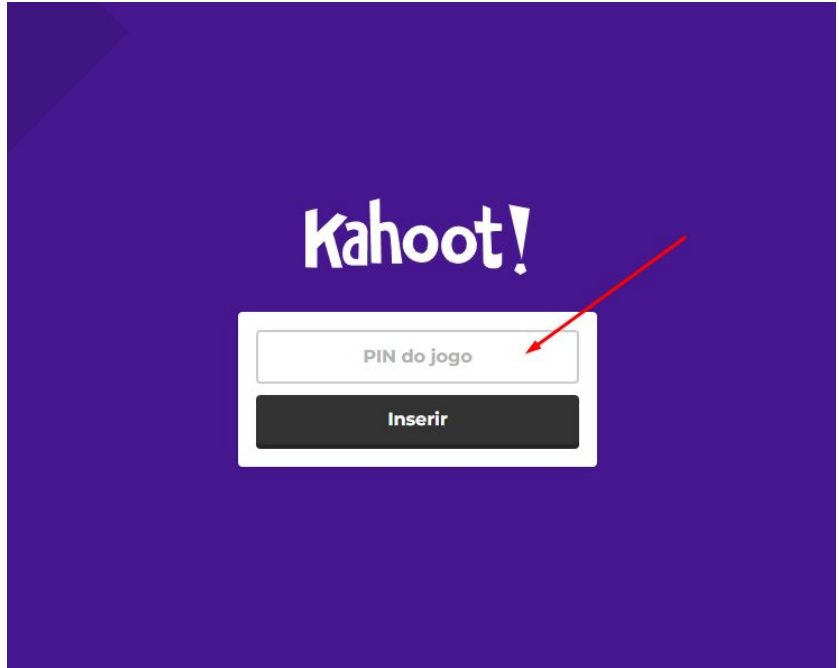
Let edunext provide the technology and support so you can focus
on the strategy.

[Create an account and start for free](#)

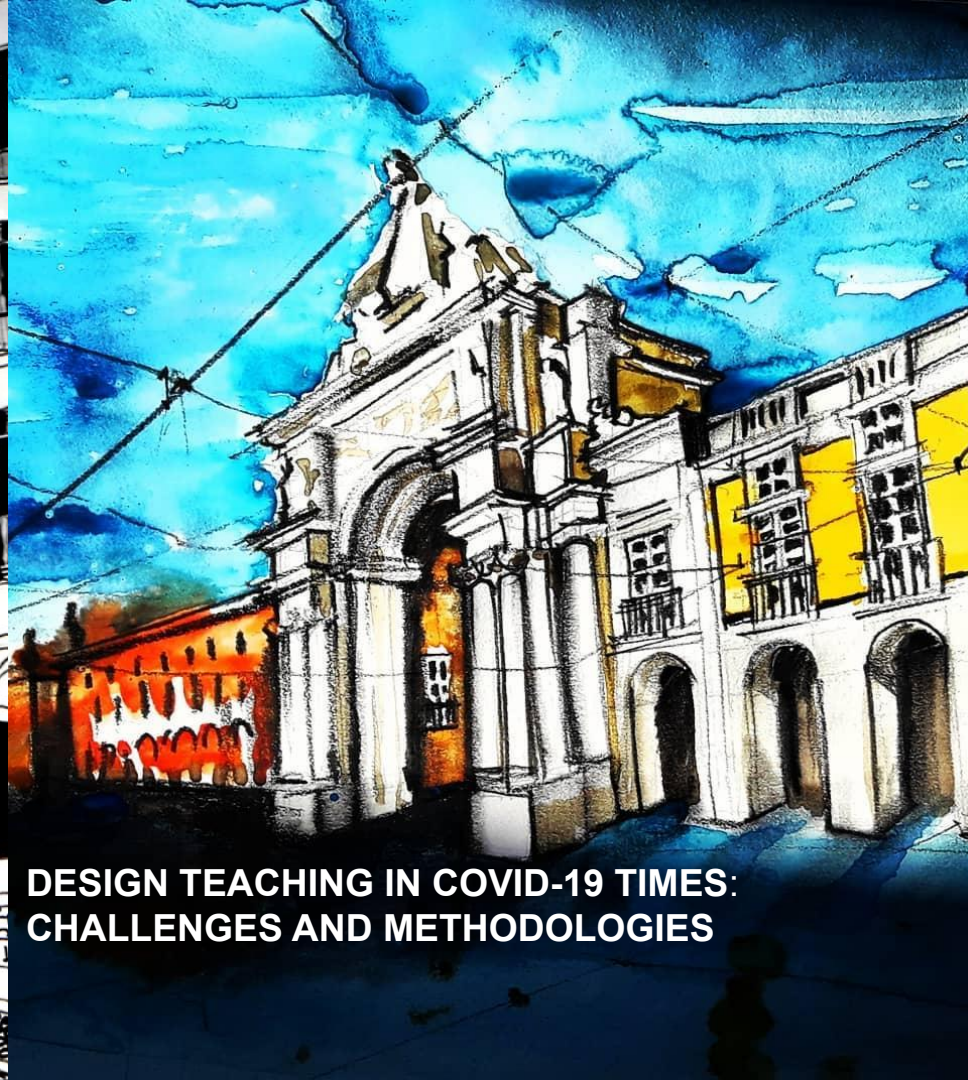
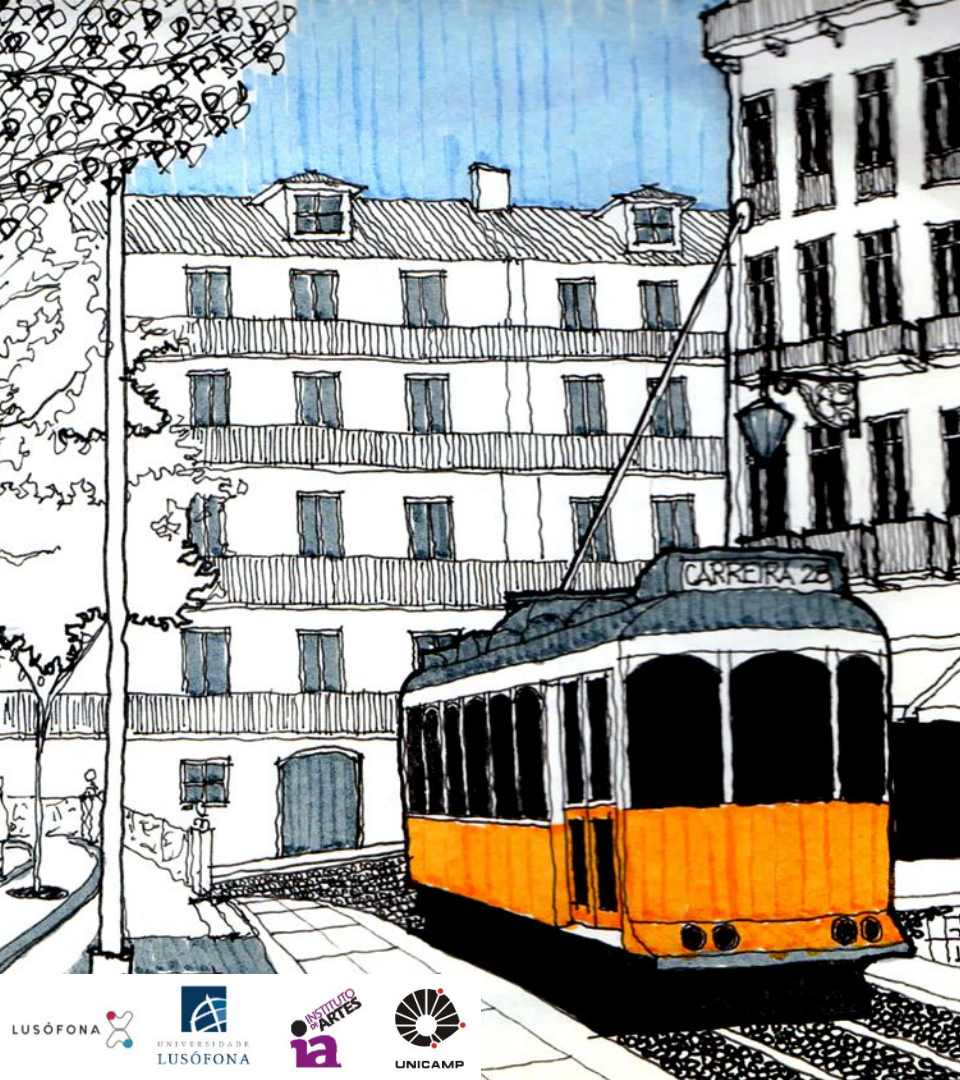
Kahoot!



<https://kahoot.it/>



Case study



DESIGN TEACHING IN COVID-19 TIMES: CHALLENGES AND METHODOLOGIES

What is a Graphic Diary?

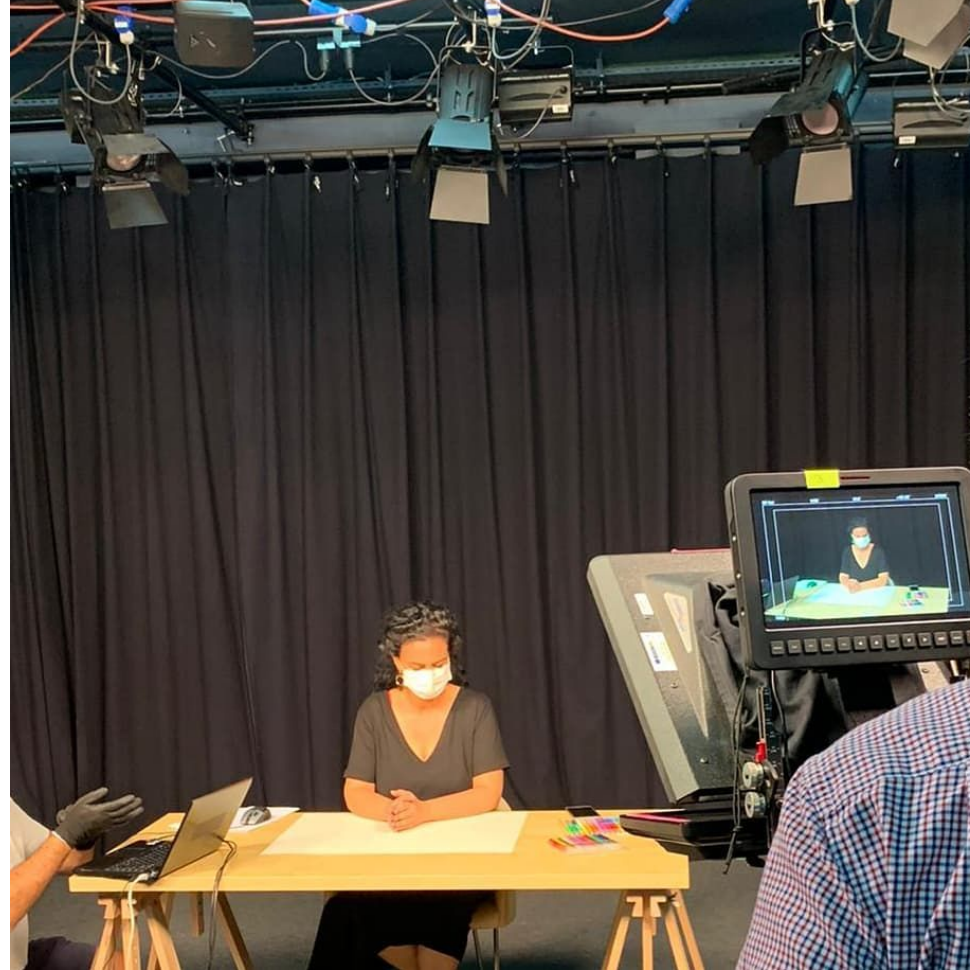
- Informal space for expression, with no rigid rules
- They are an analogue and portable object
- A space for thinking
- No fear of trying
- Intimate
- A record of time and space
- drawn on location, indoors or out, capturing what is seen from direct observation
- drawings tell the story of surroundings, the places we live and where we travel



DESIGN TEACHING IN COVID-19 TIMES

With the global framework of the Covid-19 pandemic since February 2020, a situation which, pursuant to the guidelines of the World Health Organization, impose social lockdown and consequent:

- interruption of all face-to-face collective activities which involved people gathering,
- the activities in all Architecture schools in Brazil (as in the world) were abruptly interrupted,
- and in this country the interruption happened a few weeks into the new academic year.



Course “Drawing for Graphic Diary”

In this way, the remote drawing course “Drawing for Graphic Diary”, taught at Lusófona University by Filipa Antunes and Paulo Ferreira since 2019, available before the outbreak of the pandemic, offered a learning structure that was, simultaneously, characterized by a linear set of classes, videos, exercises and questionnaires. These had 2 key goals:

- (1) to enable students to acquire critical competences in the area of drawing, and,
- (2) to enable the evaluation and monitoring of the and monitoring of the acquisition of those competences, their incorporation and critical and creative use throughout the dynamic learning and exploration process.



Objectives of the course and implemented didactic practices

Its prime objective:

- is to foster the development of “visual thinking”, along with the acquisition of specific competences, by learning different modalities of graphic expression, using multiple manual techniques and materials.
- The different exercises and contents presented in videos show the production of drawings in real time, highlighting their development with the application of techniques that produced satisfactory results, thus debunking the idea that drawing is merely the fruit of a “natural gift” and encouraging its practice by all.



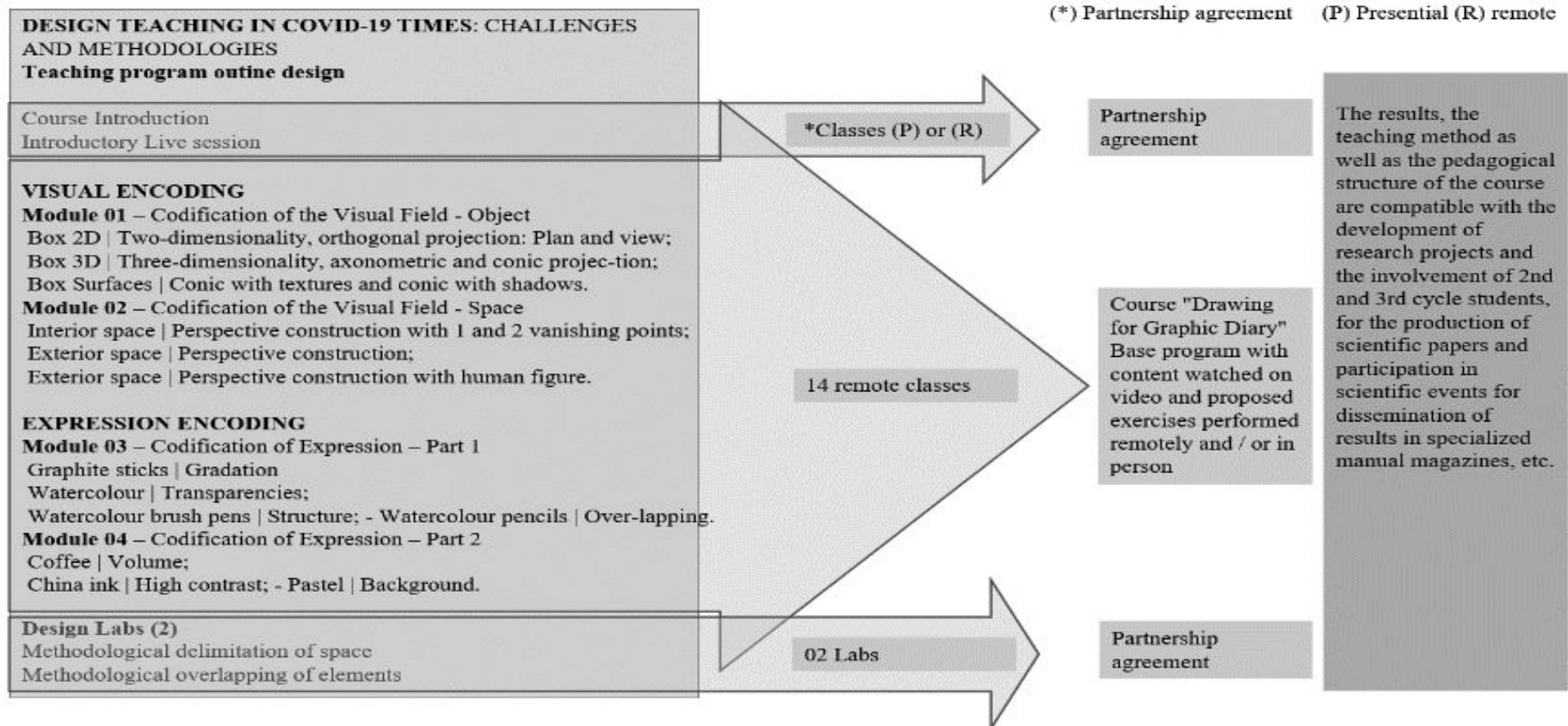
Didactic practices

Thus, aiming to achieve these objectives and methods, four didactic practices were implemented innovatively to ensure dynamics among all involved, given the need to make this a drawing course taught entirely remotely. These didactic practices were the following:

- Bimonthly tasks to be carried out within the environment of Lusofona-X;
- Online supervision to students, by e-mail and personal individual and group counselling scheduled via Google Meet, to deal with queries;
- Online classes with teachers of the course, detailing the exercises and modalities of graphic expression;
- Special classes on other topics pertinent to artistic expression and shared feedback.



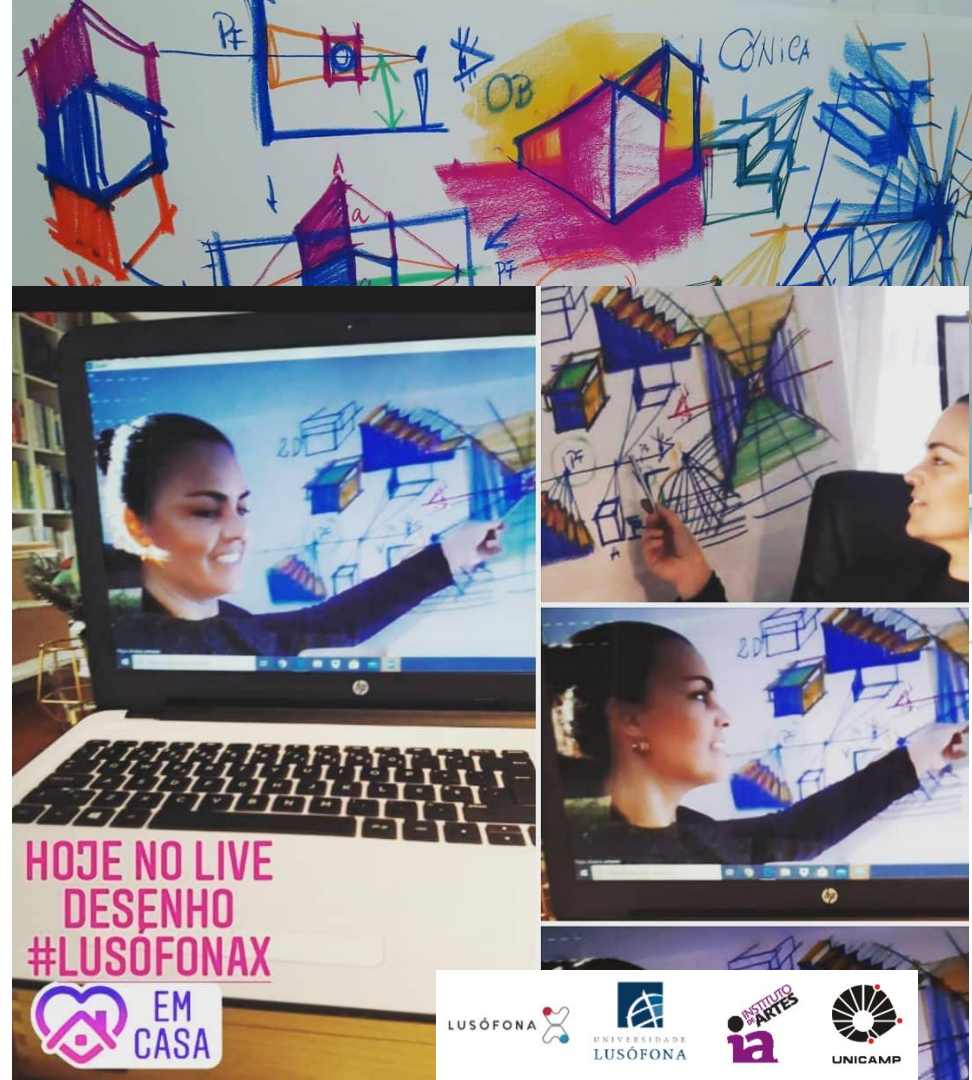
Digital platforms and learning roadmap



Live Sessions

During course offering 4 live sessions took place online;

In each live session, Professor Filipa Antunes explain each technique and drawn live one of the module exercises.

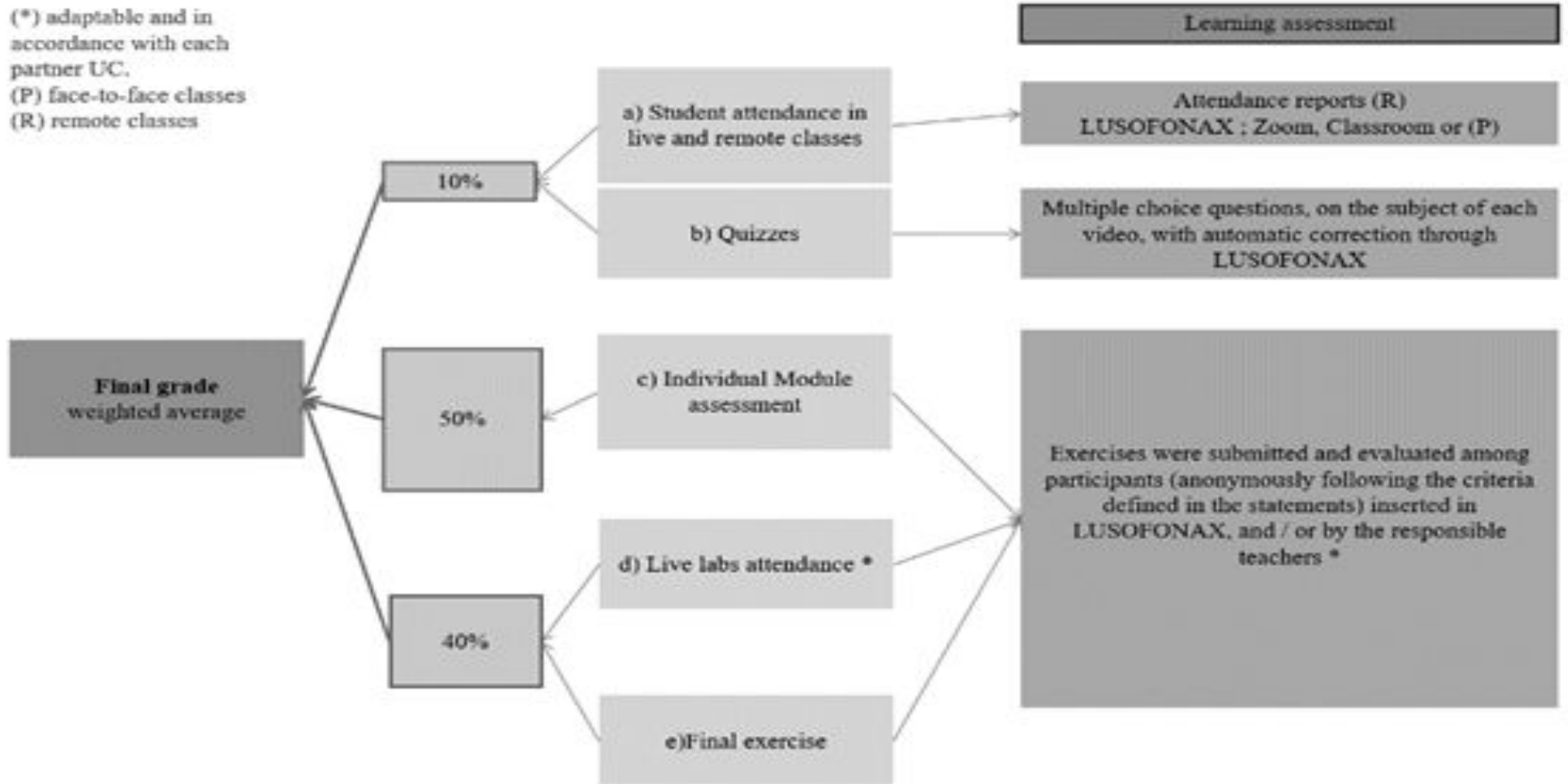


HOJE NO LIVE
DESENHO
#LUSOFONAX



General Course assignment division

(*) adaptable and in accordance with each partner UC.
(P) face-to-face classes
(R) remote classes

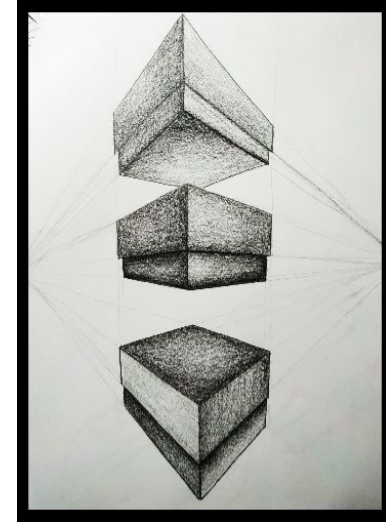
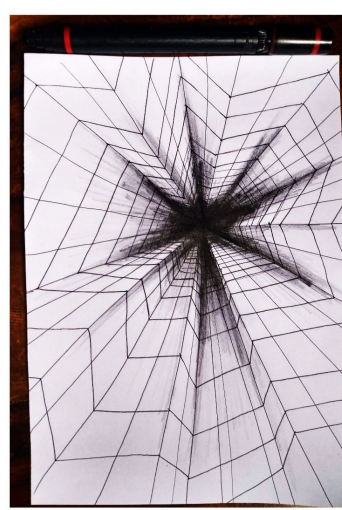


RESULTS

The assessment of the students' individual evolution, and consequently of the pedagogic methodology chosen for the course, was achieved in two ways:

- one, by applying questionnaires to the students;
- and two, by the individual evaluation of the drawings by the teachers. The individual evaluation per module carried out by the lecturers was characterized by being implemented in interaction with the students.

*. Evolution of the drawings of three students.
Left, final drawings of Module 01, Right, final drawings of Module 01 e 02. Source: Course collection.*



Evaluation of competences before and after the course

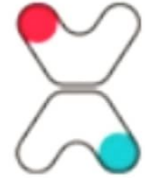
With a view to identifying each students' level of knowledge in the eight main competences developed before and after attending the course, questionnaires were applied to all the participants in two distinct stages:

- (1) before the course, to identify existing self-reported competences and knowledge in the area of artistic drawing;
- (2) after the course, to evaluate the evolution of these same competences and knowledge acquired.

Desenho 2 Episodio 3 V4
Filipa Antunes

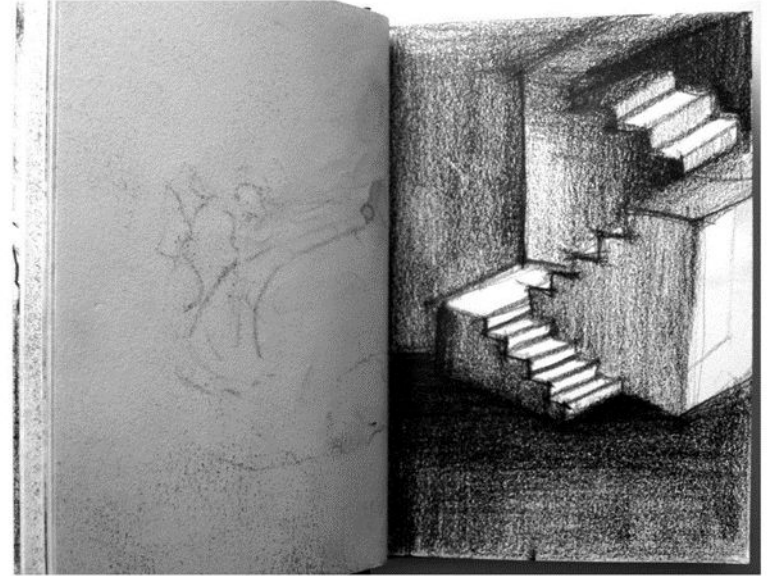


LUSÓFONA



Among other questions included in the questionnaires, those that are more relevant to the present paper are those that aim to evaluate the initial and end levels in the competences that are key to the success of the teaching/learning process of drawing, namely:

- Understanding the concept of Conic Projection;
- Understanding the concept of Two-dimensionality;
- Understanding the concept of Surface;
- Understanding the concept of Three-dimensionality;
- Concept of Vanishing Point;
- Understanding the concept of Perspective Construction;
- Understanding the concept of Visual Field;
- Understanding the concept of Visual Expression.



We concluded that a supported, close approach in interaction with the students is fruitful, despite the physical distance which was no impediment to the success of the teaching/learning process, whatever its nature or content. Provided they are designed and implemented with rigour, this type of initiatives, now fostered by COVID-19, may constitute moments of great growth for all involved.

In this particular case, the importance given to the acquisition of essentially creative and operational skills was immense, in the sense of the physical practice of the stroke allied to the reading, or decoding, of reality.

Nevertheless, we highlight that the practice of drawing as a factor of cultural creation can help us reconfigure the world we live in.



Review some Lusófona X courses

- **Structure**
- **Content**
- **Assessment**
- **General information**
- **Certificates**

<https://cursos.lusofona-x.pt/courses/course-v1:LusofonaX+DREAM+00/about>

Utilities

- [edX Courses](#)
- [Open edX Complete Feature List](#)
- [DemoX - edX Demo Course](#)
- [edX101: Overview of Creating an edX Course](#)
- [StudioX: Creating a Course with edX Studio](#)
- [BlendedX: Blended Learning with edX](#)
- [VideoX: Creating Video for the edX Platform](#)
- [edX Course User Manual](#)
- [Open edX Conference - April 26th and April 29th, 2022](#)

DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use

- <https://publications.jrc.ec.europa.eu/repository/handle/JRC106281>



For the video

- CLIMATE-FRIENDLY TECHNOLOGIES
 - Why climate-friendly? What are climate-friendly technologies? The actual technologies are not friendly?
- CLEANER PRODUCTION TECHNOLOGIES
 - What is this? Why Cleaner? To produce what? What's the impact of it for me?
- ENERGY EFFICIENCY
 - Why is this important? Why should I care about this? What can I do? How?
- RENEWABLE ENERGY
 - What is this? Why is this important?
- ENERGY TECHNOLOGIES
 - What is this? Why should I care about this?

For the video

- One topic per team
- Teams by country?
- Think about the most important message to be delivered at the end of this training for the topic chosen
- Use paper and pens or just words, gestures to deliver the message
- At the studio we will record those messages
- Be creative
- Your Goal is to reach Long-term Memory
- Each team have 1 minute or less