



***The system of support for academic teachers in process
of shaping soft skills of their students***

<https://wspaerasmus.wixsite.com/supportsystem>



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Course

Digital technologies in the process of teaching and learning

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Overview of the presentation



1) Structure and contents of the course

2) Organization of the pilot

- Pedagogical strategies
- Organization of the course
- Participants
- Appraisal/evaluation of the course

3) Final notes

1. Digital technologies in the process of teaching and learning



Modules:

- I – The role of technologies in the world and in the labour market
- II – The contribution of technologies to building environments favorable to teaching and learning
- III - Cooperation and collaboration with technologies
- IV – Safe use of technologies
- V - Examples of how to integrate technology in the learning process

MODULE I



The role of technologies in the world and in the labor market

Topic 1- Technologies in Higher Education

Topic 2- Technologies and the labour market

The role of technologies in the world and in the labour market



Global context

The existence of a globalized world and the use of new technologies such as ICT and the automation and robotization of production processes have introduced changes in people's lives and at work. Some jobs tend to disappear, and others are created. The job-related tasks that remain or will be created tend to use more technological means and more collaborative strategies between diverse teams with people of different nationalities and specialists in different scientific areas.

The disappearance of many jobs and the emergence of new tasks show us that human resources must be trained to change in the world and in the work.

The role of technologies in the world and in the labour market



H.E. context

- In Higher Education context, some questions are raised
 - *What competences should students have to respond to the technological and globalized world?*
 - *What skills should future workers have, in order to participate in the labour world?*
 - *How can HE teachers train students to be successful in the global job market?*

The role of technologies in the world and in the labour market



H.E. context

- **Individuals** in the 21st century must have problem-solving skills, creative spirit, communication skills, digital literacy (ability to find, analyse, create and use credible and reliable sources of information) (...)
- **HE Teachers** should promote in their students the skills required by the new paradigm of life and labour.

"teachers are expected to become technologically oriented and responsible not only for their teaching but also for their students' learning." (Amin, 2016, p.40).

MODULE II



The contribution of technologies to building environments favorable to teaching and learning

Topic 1 – Digital Technology in Higher Education

Topic 2 – Use of video in learning environments

Topic 3 – Mobile technology and learning

The contribution of technologies to building environments favorable to teaching and learning



This module is centered on creating learning environments enriched by the **digital technologies**, favorable to the improvement of teaching and learning in H.E.

- In the last few decades, **video** has become a means of easy use and manipulation in educational contexts, allowing teachers and students to view, share, comment and annotate, through friendly applications, many of them free and available on the WWW.
- The evolution of **mobile technologies** in recent years, making several devices increasingly powerful and with more features and services, provides new forms of digital communication.
- The mobile technologies in education facilitate the acquisition of new learning in different contexts and allowing access to content anywhere and anytime.

MODULE III



Cooperation and collaboration with technologies

Topic 1 - Collaboration and collaborative learning with ICT

Topic 2 - Learning communities and peer learning

Topic 3 - Communication between teachers and students

Cooperation and collaboration with technologies



- Some of the main challenges of Higher Education are related to the integration of ICT in the teaching and learning processes.
- This is particularly relevant regarding the need to create collaborative and participated learning environments, contributing to students learning and development in different areas – academic, professional, personal.
- In this sense, it is crucial for teachers and other Higher Education professionals to acquire knowledge in the areas of collaboration, learning communities, peer learning and communication, particularly using ICT.

Cooperation and collaboration with technologies



This module focus on the relevance of:

- Collaboration and collaborative learning, particularly with the use of ICT, and its relevance in the learning processes. It identifies benefits and the reasons for its use, addressing the processes, factors and strategies that promote collaborative learning in HE,
- Learning communities and peer learning, particularly using ICT, identifying their relevance in HE contexts, highlighting the processes, factors and communication tools that promote peer learning,
- Effective communication between teachers and students, exploring its relevance in the learning process. It analyses communication processes and tools, particularly using ICT.

MODULE IV



Safe use of technologies

Topic 1 - Credibility of available information

Topic 2 - Social networks and online behavior

Topic 3 – Digital footprint

Safe use of new technologies



- Digital technologies are changing profoundly the way we position ourselves in the world — the way we communicate, relate, and learn.
- Today, students have access to materials and information that allow them to learn and progress in their own learning.
- However, they can also get lost in the heap of information that is the Internet. They may not have the tools to distinguish the truly relevant information or even know whether the information is true or not.
- On the other hand, they are often unaware of the personal information that they leave on the Internet.

Safe use of new technologies



This module focus on:

- The challenges raised by the fake news and misinformation in internet and the recognition of the quality content of the information available,
- The risks of disinformation in digital and social networks, namely through video sharing networks,
- The risks and implications of the digital footprint;

Analysing the role of the teachers and educational institutions in supporting students to overcome these challenges.

MODULE V



Examples of how to integrate technology in the learning process

Topic 1 – Digital portfolios

Topic 2 – Flipped classroom

Topic 3 – Gamification in education

Examples of how to integrate technology in the learning process



- The information society has been providing tools to our day-to-day life that allow new ways of thinking, acting and communicating
- Educational contexts have gradually adopted some of these tools and have built models for integrating technologies in the learning process.

Examples of how to integrate technology in the learning process



This module is centered on:

- Development of pedagogical approaches with an increasing importance in higher education, due to the implications they have for changing teaching practices
- Building rich learning environments with digital technologies
- Developing practices where the student has a central role, and the teacher is a learning organizer and a tutor to support the student learning

2. Pedagogical strategies of the course



The strategies that gave shape to the course took into account the following principles:

- sharing the expectations and interests of the participants in the course,
- valuing the experience gained as the basis for learning,
- offering opportunities to analyse concrete problems posed by professional practice,
- promoting an open and positive environment, facilitating discussion and criticism,
- launching challenges in order to boost reflective and critical attitudes,
- valuing each teacher as the transforming element of their practice.

Pedagogical strategies of the course



Thus, the pedagogical strategies developed in the course were intended to promote participation, sharing of experiences, reflection on practices, discussion and interaction between the participants, in order to reinforce the relationships between peers and build more meaningful learning, creating the conditions for the transformation of practices.

Organization of the pilot



- The pilot ran from June 1 to September 24, including all modules
- Model adopted for each topic:
 - 1st day - resources were made available and a challenge was launched in a Moodle forum, to promote work with the resources.
 - 3rd day - there was a synchronous session for systematizing information, presenting papers and discussing the topic.
 - 4th day - the self-assessment quizz was available.

Number of participants



| | Module 1 | Module 2 | Module 3 | Module 4 | Module 5 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|
| IPS School of Business | 2 | 3 | 2 | 2 | 3 |
| IPS School of Education | 4 | 5 | 5 | 5 | 2 |
| IPS School of Health | 0 | 3 | 3 | 2 | 2 |
| IPS Barreiro School of Technology | 4 | 4 | 4 | 3 | 1 |
| IPS Setúbal School of Technology | 2 | 3 | 4 | 3 | 6 |
| | 12 | 18 | 18 | 15 | 14 |

3. Appraisal / evaluation of the course



| | Was the quality of the content consistent throughout the module? | How engaging would you say the overall content was? | Was the content in-depth enough? | How would you rate the overall module content? | Was the module easy to follow? |
|----------|--|---|----------------------------------|--|--------------------------------|
| Module 1 | 4,1 | 4 | 4,2 | 4,3 | 4 |
| Module 2 | 4,5 | 4,3 | 4,2 | 4,2 | 3,8 |
| Module 3 | 4,8 | 4,7 | 4,3 | 4,7 | 4,6 |
| Module 4 | 4,6 | 4,6 | 4,3 | 4,6 | 4,6 |
| Module 5 | 4,3 | 4,3 | 4,0 | 4,5 | 4,4 |

Scale: 0-5

Appraisal of participants



Favorable aspects:

- The content of the course (despite sometimes being very in-depth), was considered consistent, and the modular design was easy to follow;
- The course gave the opportunity to reflect, as a group, on topics that are very important for the teaching and learning processes;

Suggestions to improve:

- More time between synchronous sessions: forums would need more feedback (both from peers and trainers - the forums get more interesting as time passes by);
- It would be nice to have a more practical final topic (so that the trainee could implement some of the content presented, for example, in a specific subject).

Final notes



Teaching challenges in the pandemic context:

- The pilot course has been developed in turbulent times, where technologies were an essential resource to the process of teaching and learning, to communication between teachers and students, collaboration between students, between teachers, and so on ...
- "Sharing the crisis" (according to academics) was crucial to break the isolation, dialogue with colleagues, have new ideas to overcome unexpected difficulties, ...
- Creating opportunities to reinforce the **community**, teachers' **autonomy** and **knowledge** (Nóvoa, 2002).



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Thank you for your attention!



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