

From face-to-face to online learning: Designing a pedagogical model for a higher education context

A. Loureiro, I. Messias, D. Rocha, N. Ricardo Oliveira

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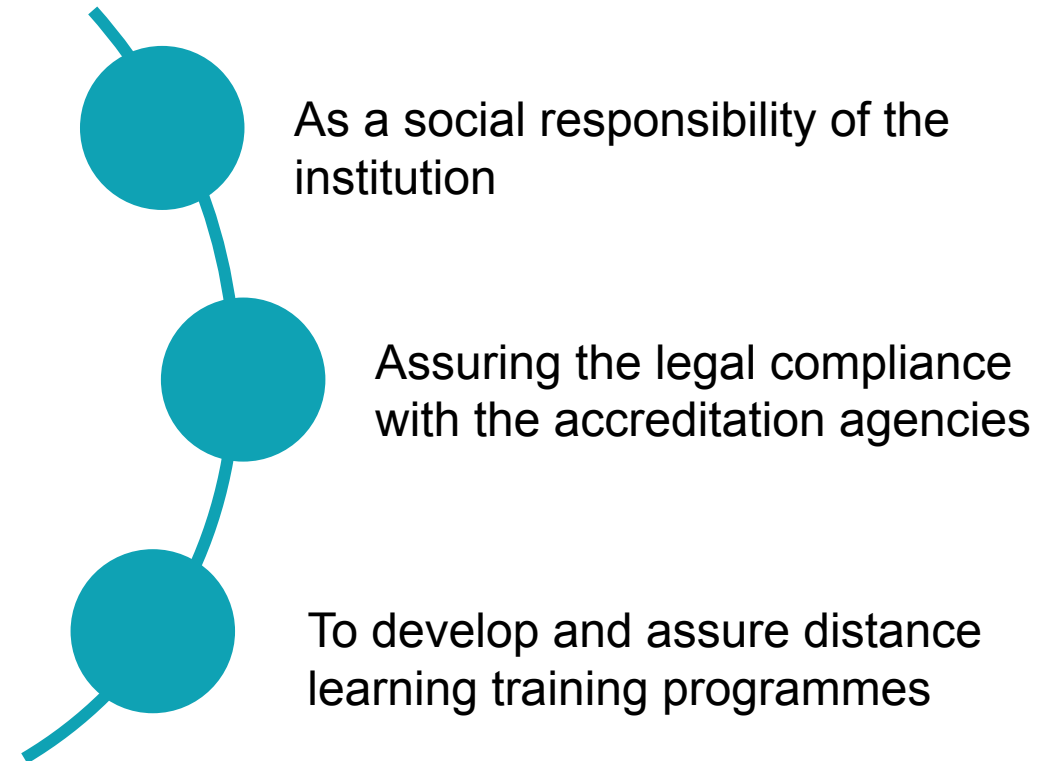
In a Digital Society
where technology
has become
ubiquitous

Higher Education
Institutions (HEI) are
making digital
transition

Aiming to change the ways
programmes are delivered, to
assure the development for a
quality distance learning offer.

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To answer the call to the digital transition HEIs have been investing in the development and redesign of pedagogical models



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Teaching and
Learning online
has its own
specificities



Emergency Remote Education

requires certain pedagogical adaptations

Design and conception of a pedagogical model for online
and distance education is crucial and urgent!

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Online Education > E-Learning and Emergency Remote Learning

“(...) an approach to teaching and learning, representing all or part of the educational model applied, that is based on the use of electronic media and devices as tools for improving access to training, communication and interaction and that facilitates the adoption of new ways of understanding and developing learning.”

Sangrà, Vlachopoulos, and Cabrera (2012)

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Online Education > E-Learning and Emergency Remote Learning

Online Education must also ensure that the principles of the 2030 Agenda for Sustainable Development (2015) are met, namely fulfilling Sustainable Development Goal 4 (SDG4): “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”

HEIs must define and provide quality training programmes, keeping in mind the idea that anyone around the world is a potential student.

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Online Education > E-Learning and Emergency Remote Learning

The OECD Future of Education and Skills 2030 (2018) “aims to help education systems determine the knowledge, skills, attitudes and values students need to thrive in and shape their future”

To achieve this outcome and to prepare citizens for the 21st century, HEIs should provide training programmes to develop transformative competencies among students

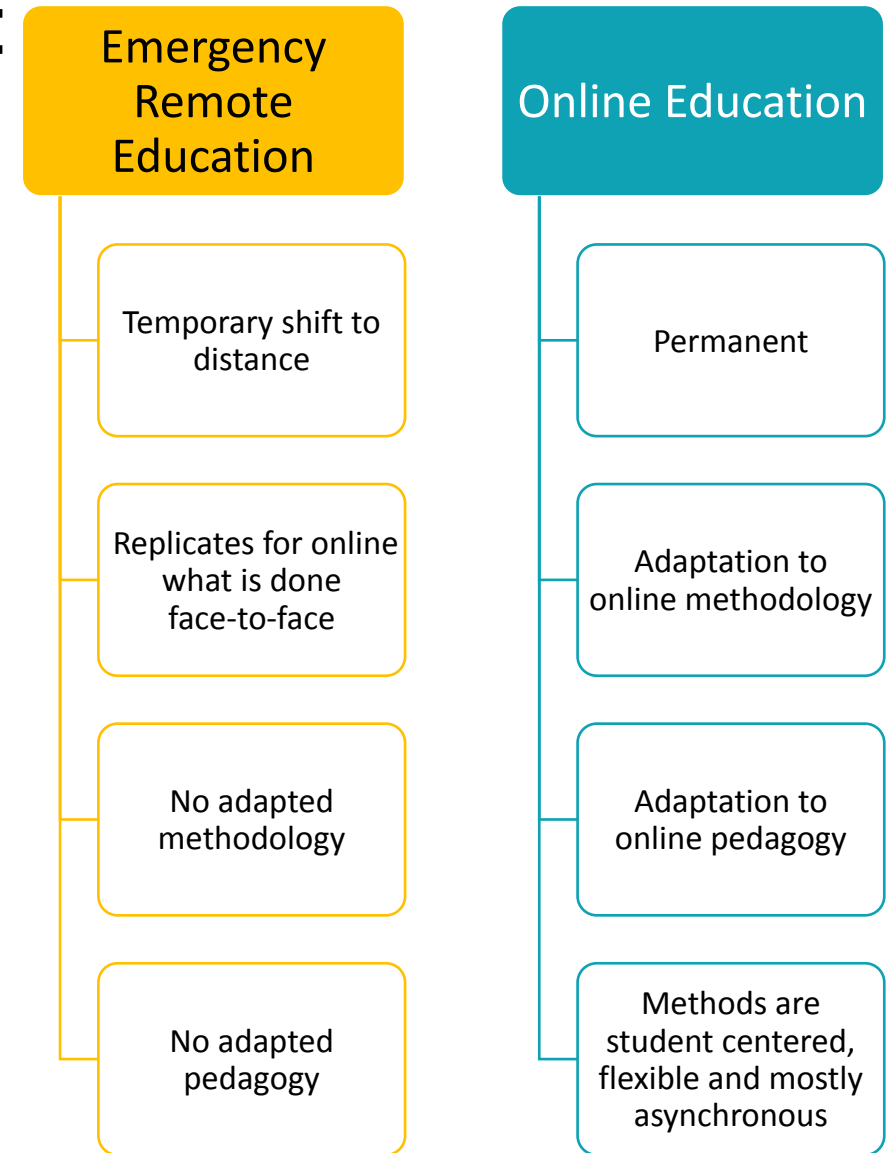
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Online Education > E-Learning and Emergency Remote Learning



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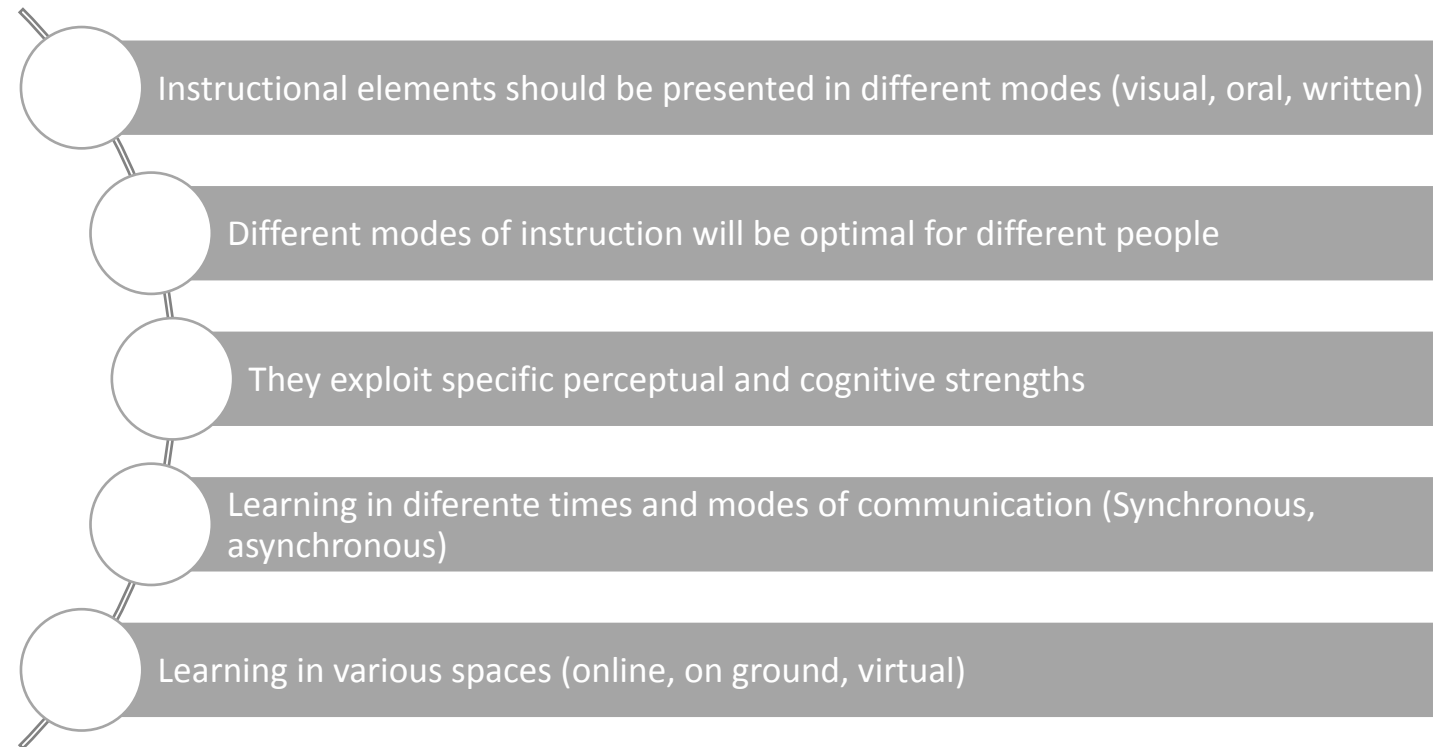
Online Education > E-Learning
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Pedagogical model for online education

Multimodal Learning Environments



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Pedagogical model for online education

Multimodal
Learning
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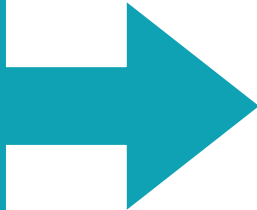


- Freedom
- Design of each student's unique hybrid experience

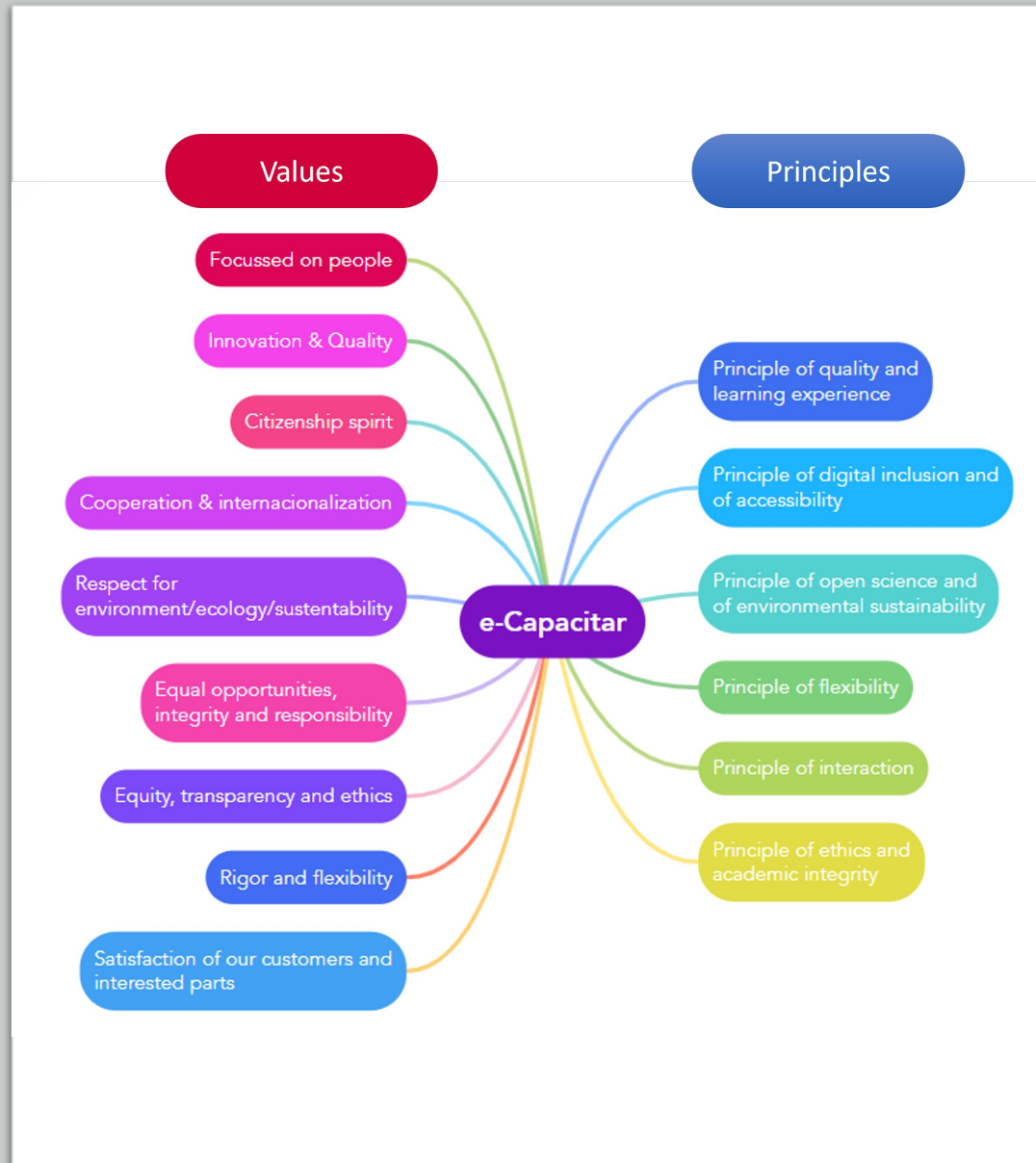
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Pedagogical model for online education

Students have
to master skills
to learn online

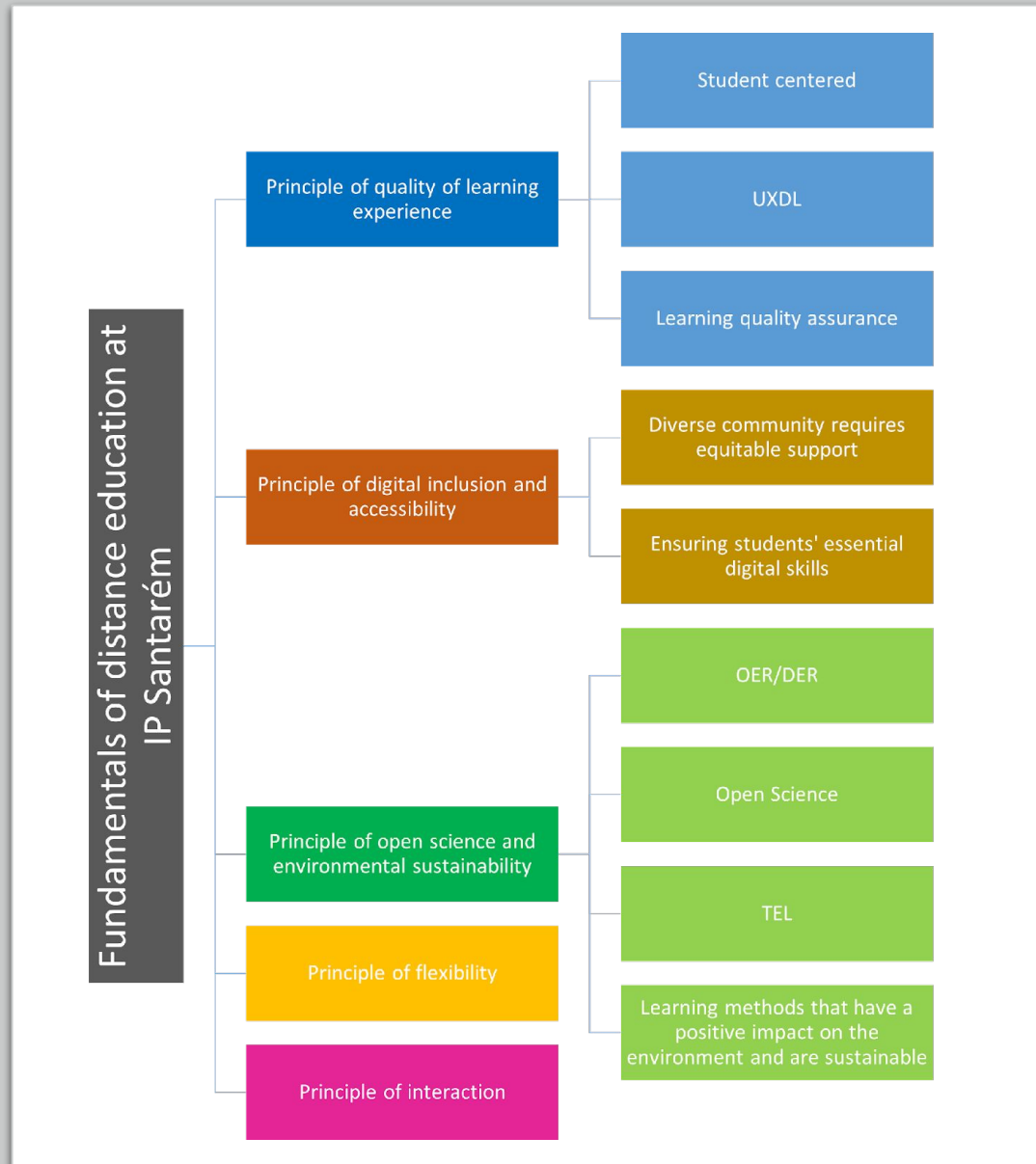


- Competency of technology usage
- Self-directed learning
- Access to technology
- Confidence in prerequisite skills and in themselves
- Motivation
- Time management
- Good study habits with independent learning skills



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Thus, it will attempt to respond to the following indicators, provided for in the ORSIES (2020)

- #3. Principles of Ethics, Social Responsibility or Sustainability in Teaching, Research and Knowledge Transfer - HEI acts according to commonly defined principles and values recognized by all and strives to apply these guidelines in the three spheres of action: teaching, research and transfer to the community
- #5. Participation and management of initiatives on Ethics, Social Responsibility and Sustainability - HEI engages in internal and external initiatives to promote Ethics, Social Responsibility and Sustainability;
- #9. Personal and professional development - HEI values the contribution of each employee and promotes conditions for each one's personal and professional growth through training in relevant areas;
- #19. Collaborative learning - HEI provides learning contexts that value collaborative work;
- #21. Innovation in Teaching-Learning - HEI is awake to the importance of curricular innovation, provides training, technological resources, and support for teachers to define methodologies that meet new demands and needs;
- #23. Lifelong learning - HEI offers differentiated training that is appropriate to the needs of new audiences, in new formats and different media;
- #26. Collaborative research - HEI favours the development of research topics that integrate multiple fields of knowledge and that values the interaction between internal and external actors of the HEI;
- #30. Scientific dissemination and transfer practices integrated into teaching - HEI values the acquisition of skills by students for the transmission of information to non-specialized audiences;
- #31. Open Science - HEI is guided by the national guidelines of Open Science and implements measures to encourage open publication among the academic community.

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Project's methodology

Systematic literature review

- analysis and comparison of online learning models already in use in different HEI

framework defining the profile of an online teacher was conceived

- based on the different official European reports (such as UNESCO, UNICEF, EU and EIFEL)

National legislation in this field was considered

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Project's work methodology

Defining the composition of the team
for the development of the
pedagogical mode

Defining premises for the justification of the selected elements

- Scientific and pedagogical competencies around online education
- Knowledge of the context of the scientific areas of IPSantarém
- Experience in lifelong learning
- Organisational change

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Project's work methodology

Know and define structuring axes for the design of the pedagogical model

Listen to the educational community of IPSantarém and external partners (stakeholders)

- understand the specific needs of this Model in the specific context of IPSantarém

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Project's work methodology

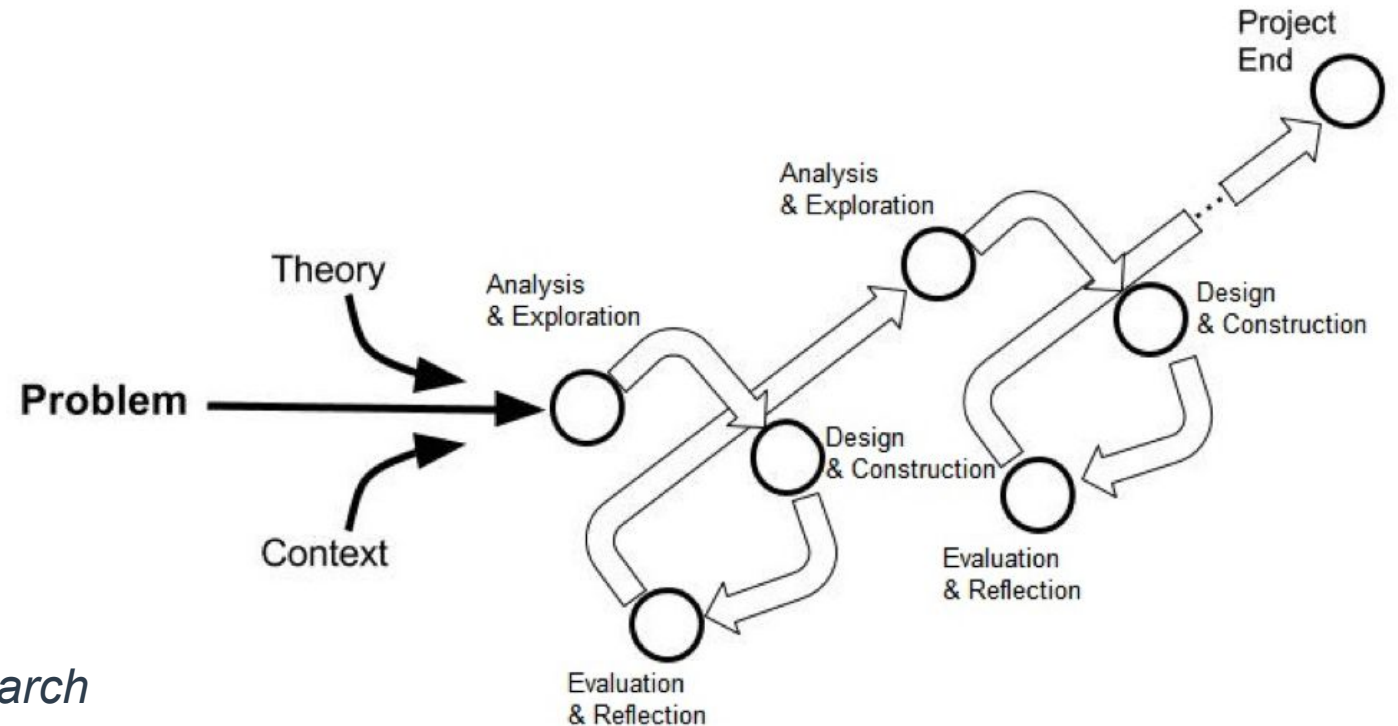
Qualitative methodology of
focus group data collection
was used

The data collected supported
the design of the Model

- Definition of the fundamentals of online and distance education at IPSantarém
- Model's application methodology

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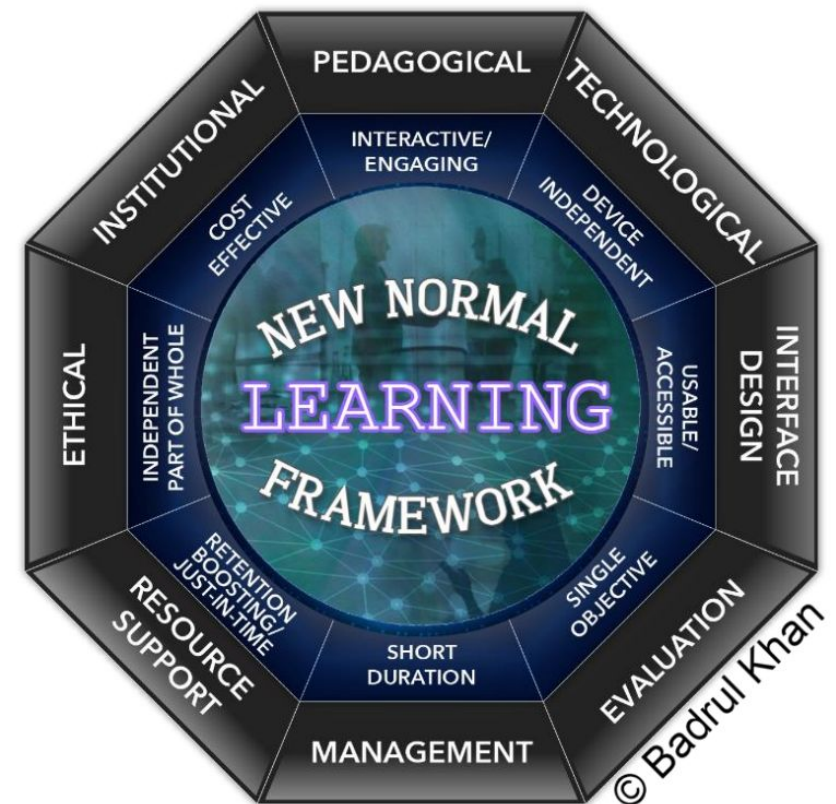
To develop the pedagogical model, we used a design-based research (DBR) approach



The Iterative Process of Design-Based Research
(McKenny and Reeves, 2012)

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To develop the pedagogical model, we grounded our model in the NNL Framework from Khan (2022)

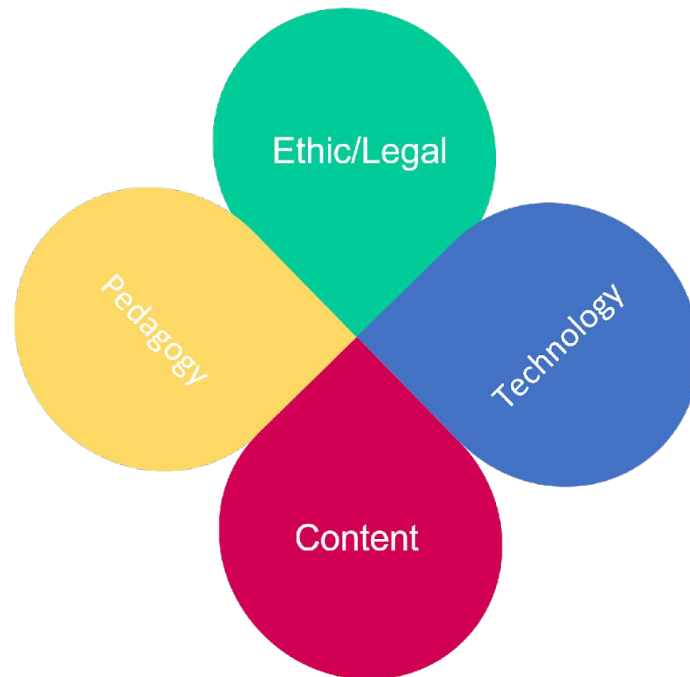


The New Normal Learning Framework
(Khan, 2022)

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Results:

IP Santarém's Distance Education
Teachers' Competency Framework



- Have mastery of the area of knowledge that will teach
- Know the relevant legislation with regard to copyright rights, creative commons, individual rights of equal opportunities, data protection security standards, and about occupational safety and health standards framed with the learning environment/content
- Master the basic ICT skills
- Have experience as a teacher/student in distance learning
- Have knowledge of how to apply digital skills in their teaching practices
- Be aware of specific pedagogical tools and strategies for augmented teaching with ICT
- Know how to articulate and interconnect Pedagogy, Technology and Content

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Conclusions

Hybrid-flexible courses based on a pedagogical model that can support and to respond to multimodal learning environments is vital. The diversity of contexts, students, faculty, contents, resources, devices, tools, environments, profiles is huge, and HEI must be able to give a proper and effective response to fulfil the needs in terms of teaching and learning.

From the analysis we made of the various pedagogical models used in several HEI we concluded that we should ground ours under the principles of quality and learning experience; ethics and academic integrity; digital inclusion and accessibility; open science and environmental sustainability; flexibility; and interaction. Having a tailored model that fits the needs of the students and faculty is mandatory, so that education can occur independent from time, space, and digital devices.

Define the right profile of an online distance education teacher in higher education is also important to establish the needs for capacity building to develop the necessary competences (pedagogy, technology, content). More than ever teachers must be updated concerning their many skills, due to the fast pace, the on demand, and the just-in-time characteristic of the contemporary society.

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Project's Team:



Ana Loureiro
Polytechnic Institute of
Santarém; LE@D;
CIEQV (PORTUGAL)



Inês Messias
Polytechnic Institute
of Santarém; LE@D;
ISTAR (PORTUGAL)



Dina Rocha
Polytechnic Institute
of Santarém
(PORTUGAL)



Nuno R. Oliveira
Polytechnic Institute of
Santarém; ISEC Lisboa;
LE@D (PORTUGAL)

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Thank You!