

# A proposal for training in digital competencies for future teachers in Catalonia



Proposta interuniversitària de  
**formació inicial de mestres** en  
***tecnologies digitals***

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**Inclusion and Exclusion, Resources for Educational Research?**

# Interuniversity proposal of initial training of teachers in digital technologies

(Proposta interuniversitària de formació inicial de mestres en tecnologies digitals)

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**2015 ARMIF 00027**



# Project background

- Project entitled *“Interuniversity proposal of initial training of teachers in digital technologies”* (2015 ARMIF 00027).
- Inter-university project between nine universities of Catalonia.
- Funded by the General Government of Catalonia (Generalitat de Catalunya).
- The proposal is as continuity of the work presented last year at this same conference.

## PARTICIPANTS



### Universitat de Barcelona

- Joan-Anton Sánchez (*coordinador*)
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### Universitat Internacional de Catalunya

- Maria Domingo

### Universitat Abat Oliba CEU

- Ferran Gandol

### Universitat Oberta de Catalunya

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## Specific framework

- (1) Teacher training students are not receiving suitable training regarding digital technologies** (Aguaded-Gómez, 2009, Tabicas, Guitert and Rubia, 2009; Herrada and Herrada, 2011; Losada, Valverde and Correa, 2012; Sancho, Bosco, Alonso and Sánchez, 2015)
- (2) Digital technologies are treated and implemented very differently in the curricula of Catalan universities.**
- (3) The creation of the Interdepartmental Project of Teacher Digital (PICDD) of the Educational Department** (Generalitat de Catalunya, 2016).

# Objective

**To produce an interuniversity proposal to the initial training of teachers in digital technologies**

Considering:

- (1) The previous research.
- (2) The competencies founded by the PICDD (Educational Department).
- (3) Study plans and subjects linked to digital technologies.
- (4) The practice carried out in different educational centres to discover the training needs in digital technologies.

# Digital Teaching Competence

The capacity of teachers to implement and communicate all their knowledge, strategies, skills and behaviours about technologies for learning and knowledge in real situations of their professional practice.

(Definition and dimensions established by the Generalitat de Catalunya, 2016)

# Dimensions of Digital Teaching Competence

And twenty-five descriptors of the DTC

**1. Design, planning  
and didactic  
implementation**

**2. Organization  
and management  
of spaces and  
digital resources**

**3. Communication  
and collaboration**

**4. Ethics and  
digital civics**

**5. Professional  
development**

# Methodology



## **Review of competencies**

Review the competencies defined by The Interdepartmental Digital Teaching Competence Project of the Educational Department.



## **Initial proposal development**

Elaboration of an initial inter-university proposal in relation to digital technologies.



## **Collecting opinions and experiences**

Collecting opinions from teachers' associations, active teachers and students of teaching degrees regarding the educational needs related to digital technologies.



## **Dissemination and re-elaboration**

To inform about the proposal to the heads of the different organisms in order to make possible the improvement of the proposal and to articulate its application.



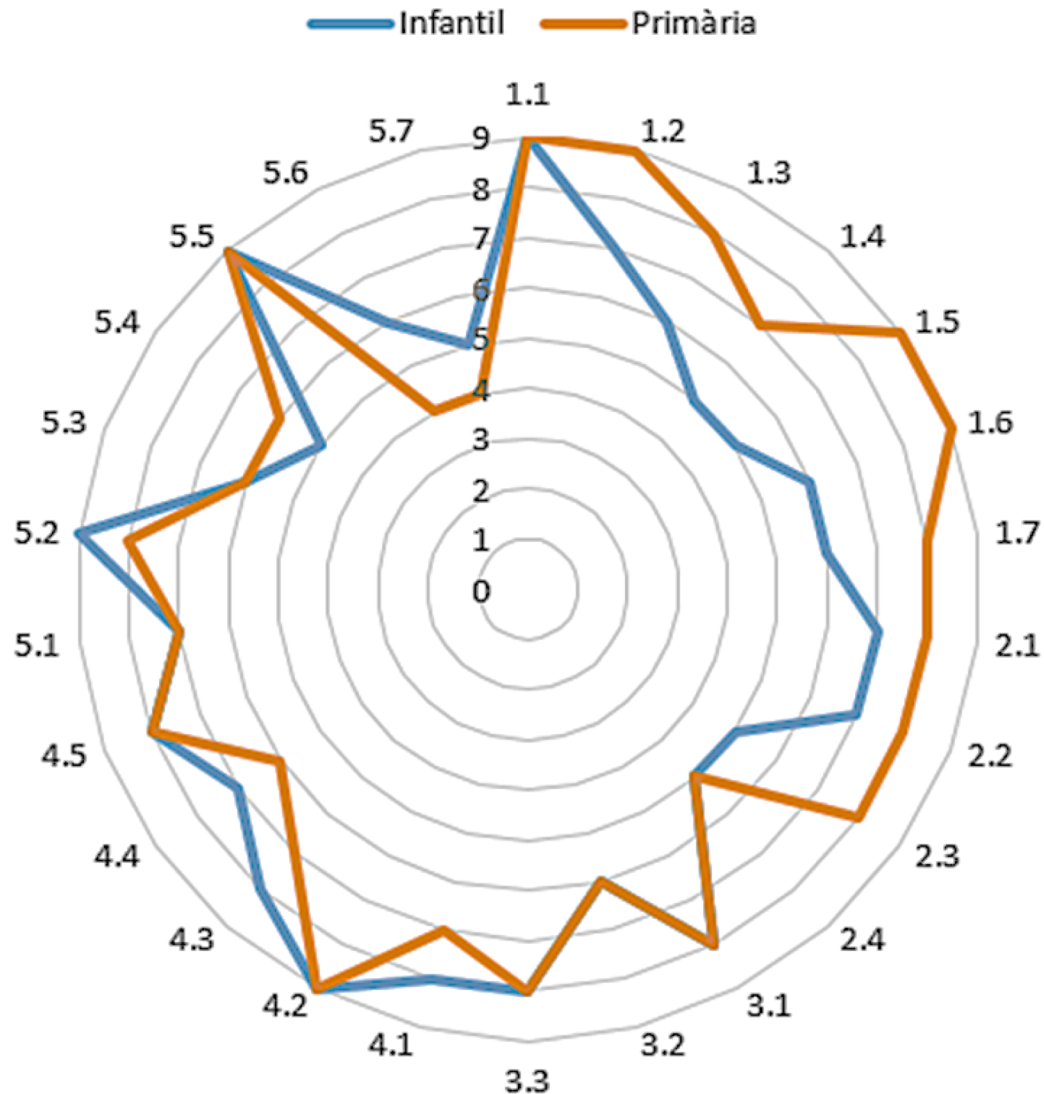


**Conclusions or findings**



# Descriptors of Digital Teaching Competence

(Pre-school and primary School teacher training degree)



1.1. Use of digital technologies as resources and strategies in teaching and learning processes (P-S y PS)

1.2. Selection of digital resources for designing activities and educational planning (PS)

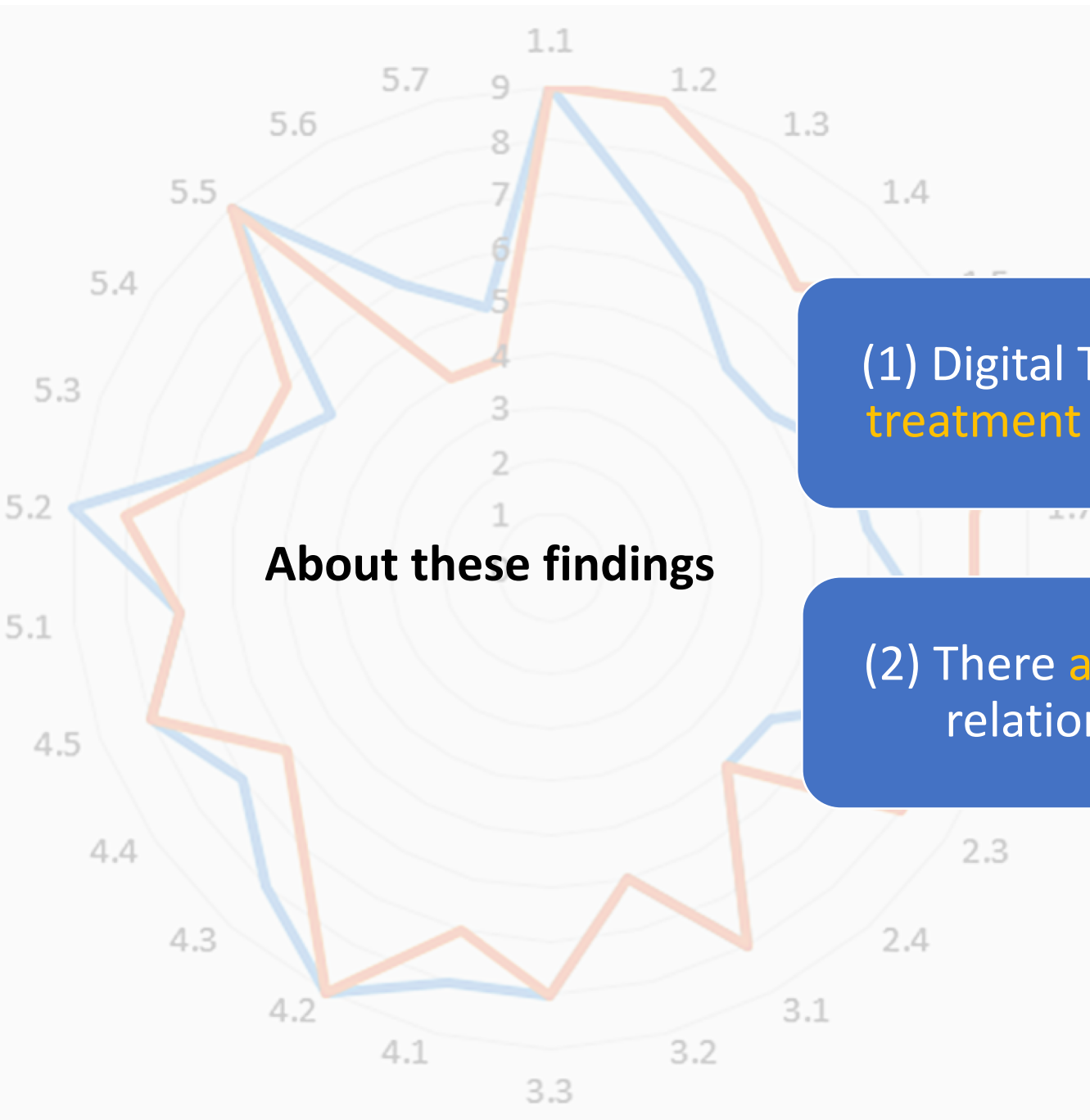
1.5. Use of digital technologies to respond to the diversity of students (PS)

1.6. Use of digital technologies in the supervision and assessment of students (PS)

4.2. A responsible, safe and healthy use of digital technologies (P-S y PS)

5.2. Reflective practice about the professional activity related to digital technologies (P-S)

5.5. Creation and dissemination of educational resources and materials on digital format (P-S y PS)



**About these findings**

(1) Digital Teaching Competence has **an unequal treatment in the study plans** of the universities.

(2) There **are shortcomings in teacher training** in relation to Digital Teaching Competence.

Regarding to discussion groups



## Associations



(1) To include a **mandatory topic** about new **training settings** and **emerging methodologies**.

(2) To influence the evolution and possibilities of **Digital Technologies**.

(3) Emphasise the relevance of **collaboration** and **critical thinking** on Digital Technologies.

(4) **Reformulate practices and assess** the Digital Teaching Competence at the end of **degree projects**.

Regarding to discussion groups



## Group of teachers

(1) Naturalise technology in teacher training.

(2) Be aware of the importance of methodology, but also of the knowledge of tools.

(3) Enhance the capacity to create, work in groups and participate in networks.



Regarding to discussion groups



## Group of students

(1) To incorporate a **mandatory introductory subject**.

(2) To find a balance **between theory and practice**.

(3) To **connect initial training with school reality**.



# Survey

The three most important dimensions are:

## (1) Communication and collaboration

- 1.1. Use of digital technologies as resources and strategies in teaching and learning processes.
- 1.3. Incorporation of digital technologies in coherence with the educational project and the infrastructures of the centre.

## (2) Professional development

- 3.1. Communication using digital technologies.

## (3) Ethics and digital civics

- 4.1. Protection of the fundamental rights to personal privacy and self-image in the use of digital technologies.
- 4.2. Responsible, safe and healthy use of digital technologies.
- 4.3. Promoting access to resources while respecting intellectual property.
- 4.4. Promoting e-inclusion.
- 4.5. Promotion of the construction of an adequate digital identity.

# Three main actions

(There is a commitment from the Conference of Deans of Education in Catalonia on all these points)

1.

## A specific treatment

**Objective:** The study plans of the teacher training degrees of each university should include a mandatory module of specific Digital Teaching Competences training (at least six credits).

2.

## An integrated treatment

**Objective:** Incorporating the descriptors of the Digital Teaching Competences in different modules of the study plans: basic training, specific didactics, practicum and final project.

3.

## An in-depth treatment

**Objective:** Universities will provide a mention in Digital Technologies, or one or different optional subjects, articulated around dimensions and descriptors of the Digital Teaching Competences.

The background of the slide features a blurred image of a laptop on the left and a hand holding a pen, writing on a tablet on the right. The entire image is overlaid with a semi-transparent orange filter.

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**Thank you!**

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