The role of **Teacher Networks** as agents for change in **shaping** teachers' digital competence

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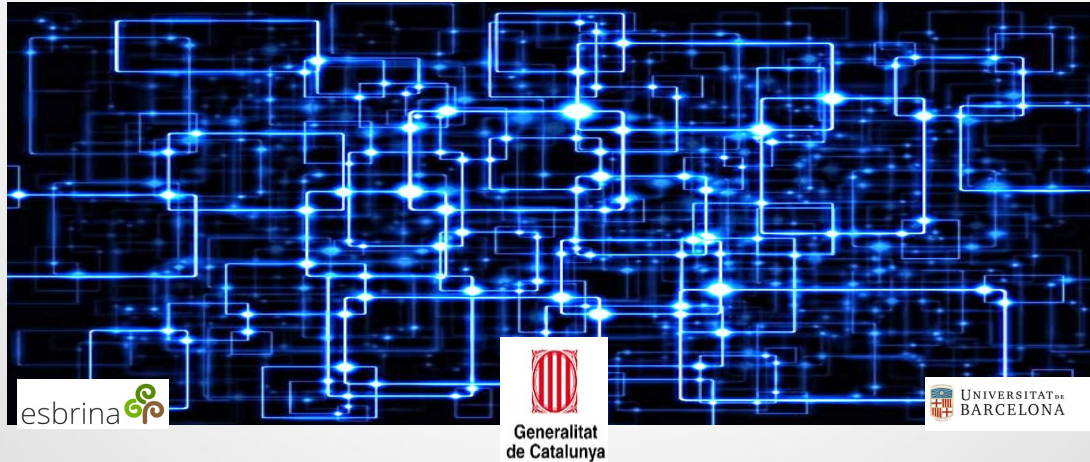Universitat Internacional de Catalunya (UIC)

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1. Presentation

Interuniversity proposal for initial training of teachers in digital technologies

Researchers

Project Overview

01. SET-DES 2016	02. 2017	03. 2017	04. 2017	05. 2018
Analysis and research competencies review	**Collection** of **opinions** and **experiences** regarding **the teacher networks**	**Elaboration** of the proposal	**Spread** of the proposal	Re-elaboration of the proposal
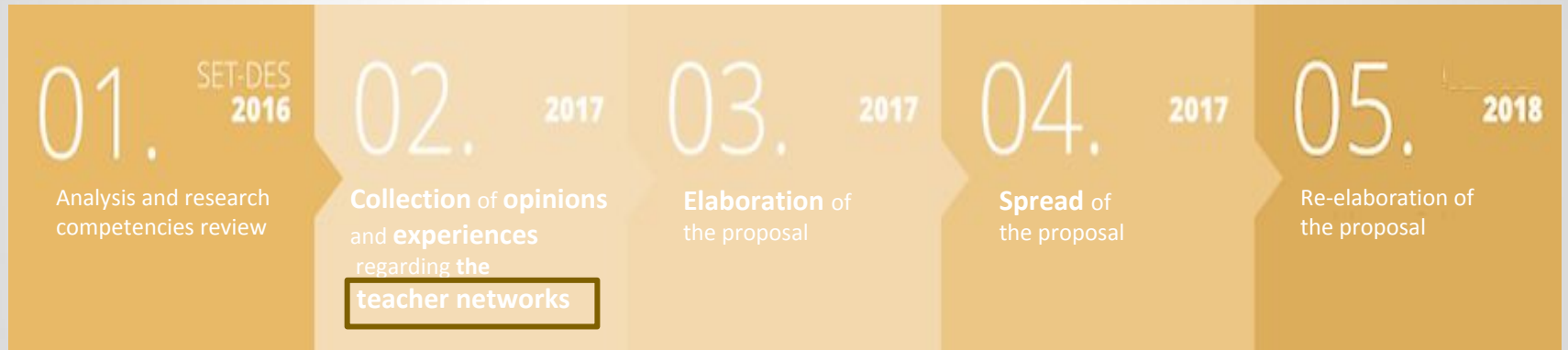
Main Goal

To **rethink** the development of
teachers' digital competence
in the initial training of teachers
from the **vision** of
teacher networks.

Scientific literature

The contribution of **teaching networks** in the **rethinking of teachers' digital competence is essential** given the potential of these networks as a force for **change** and **create** professional knowledge
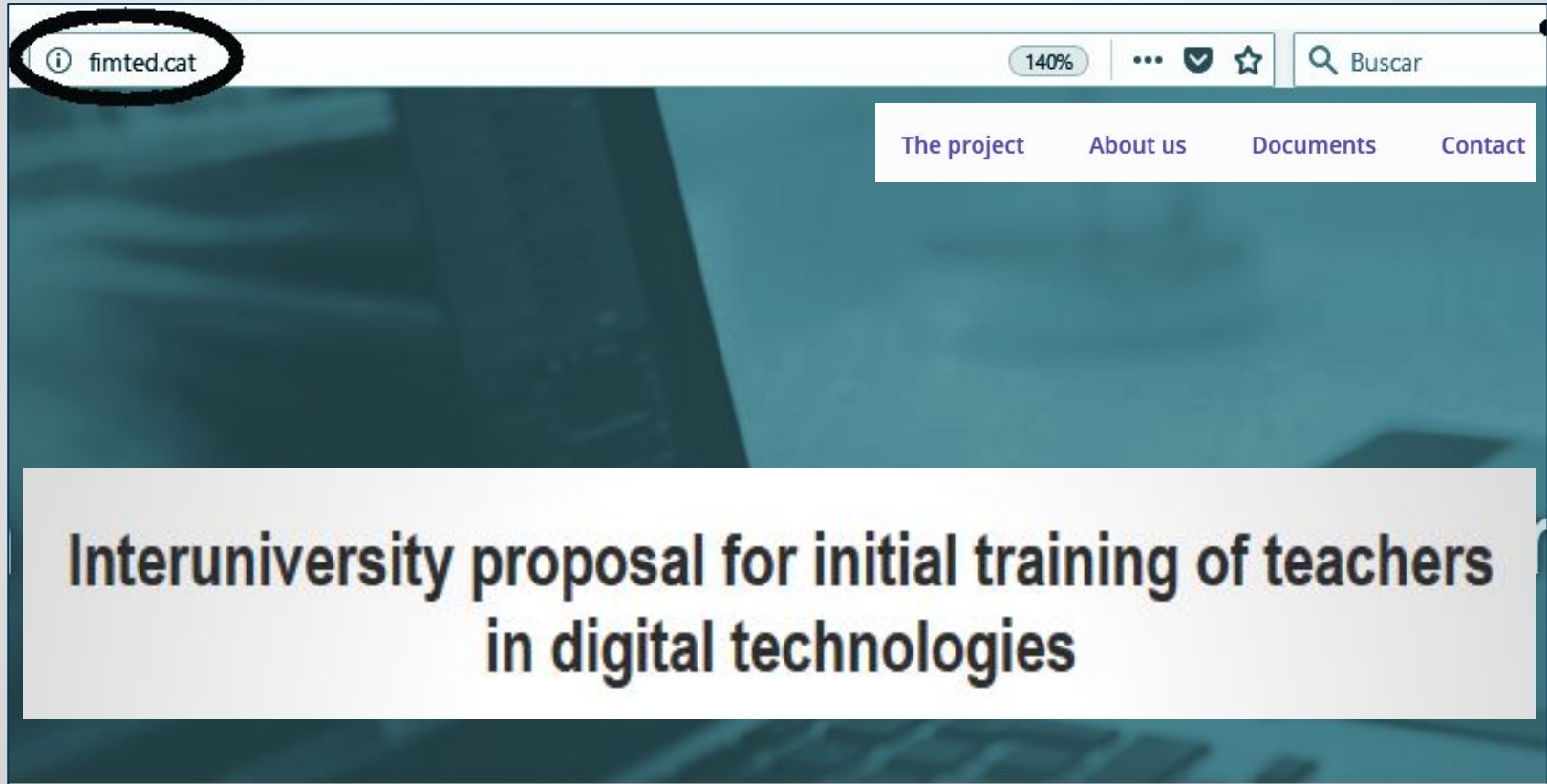(Carpenter & Krutka, 2015; Forte, Humphreys, & Park, 2012; Trust, Krutka, & Carpenter, 2016).
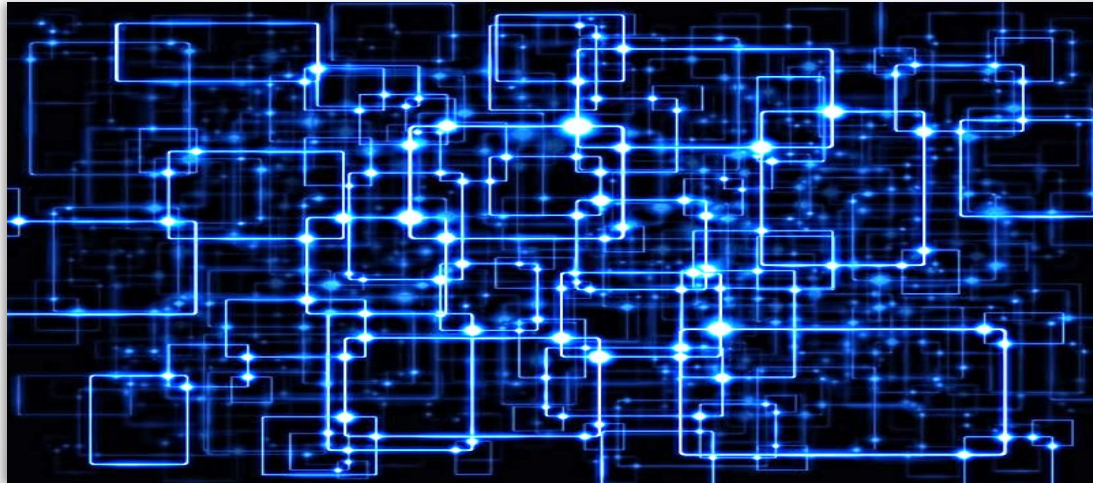
Questions

- **What is the teacher networks' appraisal**
  in relation to the development of
  teachers' digital competence?

- **What to prioritize** from
  the dimensions and descriptors of
  teachers' methodological digital competence (MDC)
  according to teacher networks?

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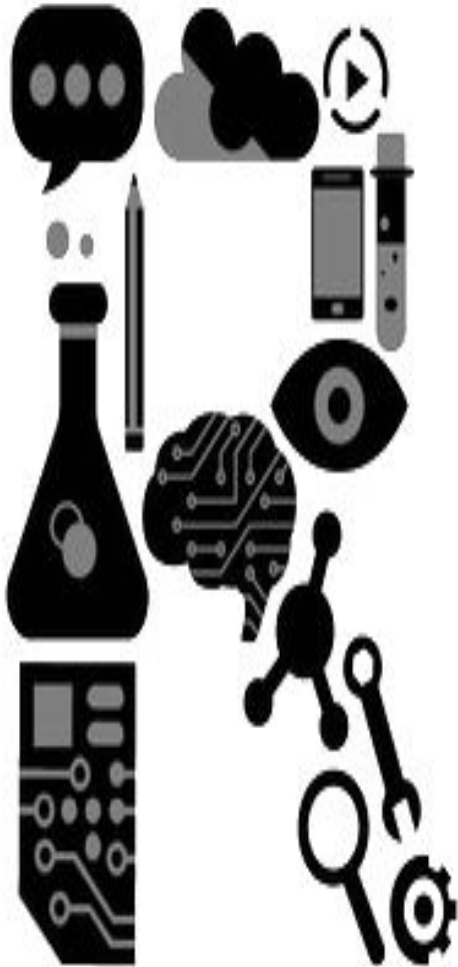Interuniversity proposal for initial training of teachers in digital technologies

2. Methodology, Research Instruments and Sources
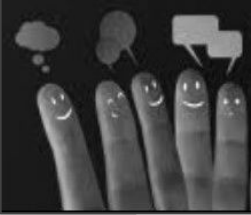
Two **instruments** were used to **collect data**:

- Focus Groups.

- Survey Questionnaire.

Focus groups

- A discussion group
  was **conducted** at the UB.
- **10 teachers** belonging
  to 5 Catalan teacher networks.
- **The group focused on 2 questions**
  with regard to the training of future teachers.

Survey Questionnaire

- **A survey of closed questions** was developed with items from the **5 dimensions** of the MDC and **its descriptors** defined by the DEGC (2016, 2018).

- **Each item** could be evaluated according to the degree of importance for the training, in the Teacher's Degree.

- What has this questionnaire **permitted** us to know

- **305 teachers responded.**

Dimension
1. Design, planning and didactic implementation
2. Organisation and management of spaces and digital resources.
3. Communication and collaboration
4. Ethics and digital civism
5. Professional development

3. Outcomes

Survey Questionnaire
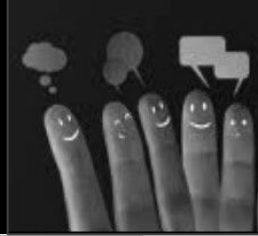
Descriptors (nº identifier)	Average
Responsible, safe and the healthy use of digital technologies (4.2)	4.46
Protection of fundamental rights to personal privacy and image in the use of digital technologies (4.1)	4.41
Promotion of access to resources respecting intellectual property (4.3)	4.21
Fostering digital inclusion (4.4)	4.18
Fostering the construction of a proper digital identity (4.5)	4.16

Prioritisation of the descriptors of Dimension 1: **Design, planning and didactic implementation**

Descriptors (nº identifier)	Average
Use of digital technologies like resources and strategies in teaching and learning processes (1.1)	4.14
Use of digital technologies to attend to the diversity of students (1.5)	4.05
Selection of digital resources for the design of activities and didactic planning (1.2)	4.03
Incorporation of digital technologies in coherence with the educational project and the infrastructures of the school (1.3)	4.03
Application of innovative methodologies with the use of digital methodologies (1.7)	4.03
Incorporation of the digital competence of students with the didactic programmes (1.4)	4.02

Prioritisation of the dimensions

Prioritised Dimensions (nº identifier)	
Communication and collaboration (3)	4.20
Professional development (5)	4.14
Ethics and digital civism (4)	4.12
Design, planning and didactic implementation (1)	4.05
Organisation and management of spaces and digital resources (2)	3.96

Focus groups

- The **educational potential** of the **Internet**.

- The **value of social networks** (Romeu, Guitert, y Sangrà, 2016)**.**

- It's necessary a **change** in the **teaching methodology**.

- It **varies** the **role of students** and the **role of the teachers** (García-Galera & Valdivia, 2014, p. 10)**.**

- The need to emphasise those **pedagogical aspects** (Camacho & Esteve, 2017).

- **Deficient ICT and informational literacies** (Guzmán-Simón et al.).

To conclude

- This research has intended
to give voice to teacher networks.

- This **rethinking** can gradually turn
university into a
learning institution
(Domingo-Coscollola, Arrazola-Carballo, & Sancho-Gil, 2016).

- We hope that **this vision**
can be taken into account and **add value**
to the **design** of future training proposals.

References

- Camacho, M., y Esteve, F. (2017). El uso de las tabletas y su impacto en el aprendizaje. Una investigación nacional en centros de educación primaria. *Revista de Educación, 379,* 170-191. doi: 10.4438/1988-592X-RE-2017-379-366

- Carpenter, J. P., & Krutka, D. G. (2015). Engagement through microblogging: educator professional development via Twitter. Professional Development in Education, 41(4), 707-728. doi: 10.1080/19415257.2014.939294

- Departament d'Ensenyament de la Generalitat de Catalunya (2016). Resolución ENS/1356/2016, de 23 de mayo, por la que se da publicidad a la definición de la Competencia digital docente. Diari Oficial de la Generalitat de Catalunya, 7133. Recuperado de https://goo.gl/4gXKp2

- Departament d'Ensenyament de la Generalitat de Catalunya (2018). Competència digital docent del professorat de Catalunya. Barcelona: Generalitat de Catalunya.

- Domingo-Coscollola, M., Arrazola-Carballo, J., & Sancho-Gil, J. M. (2016). Do It Yourself in education: Leadership for learning across physical and virtual borders. International Journal of Educational Leadership and Management-IJELM, 4(1), 5-29. doi: 10.17583/ijelm.2016.1842

- Forte, A., Humphreys, M., & Park, T. H. (2012, May). Grassroots Professional Development: How Teachers Use Twitter. In J. G. Breslin (Chair), Proceedings of the Sixth International Conference on Weblogs and Social Media-ICWSM-12. Dublin: AAAI Press.

- García-Galera, C., & Valdivia, A. (2014). Media Prosumers. Participatory Culture of Audiences and Media Responsibility. Comunicar, 43(22), 10-13. doi: 10.3916/C43-2014-a2

- Guzmán-Simón, F., García-Jiménez, E., & López-Cobo, I. (2017). Undergraduate Students' Perspectives on Digital Competence and Academic Literacy in a Spanish University. Computers in Human Behavior. 74, 196-204. doi: 10.1016/j.chb.2017.04.040

- Romeu, T., Guitert, M., y Sangrà, A. (2016). Teacher collaboration network in Higher Education: reflective visions from praxis. *Innovations in Education and Teaching International, 53*(6), 592-604. doi: https://doi.org/10.1080/14703297.2015.1025807

- Trust, T., Krutka, D. G., & Carpenter, J. P. (2016). "Together we are better": Professional learning networks for teachers. Computers & Education, 102, 15–34.doi:10.1016/j.compedu.2016.06.007

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