EdDiCo
Supporting the Development of the Digital Competences of Educators

Needs and Expectations of Educators on Digital Competences

Jochen Ehrenreich

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Eden Annual Conference 2020

B4 Workshop 3: Creating contemporary learning environments for digitally competent teachers

EdDiCo at a Glance

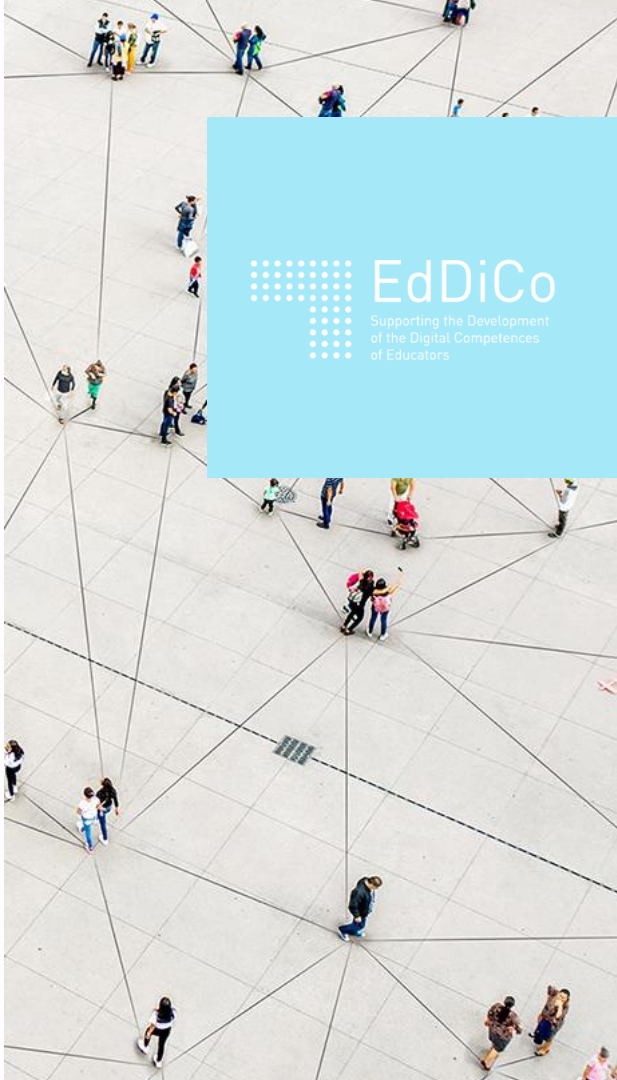
With the advent of each new technology come predictions of fundamental changes in education. Yet few of these changes have been realized. Digital learning may indeed be the technology that breaks that pattern, but this will only come to pass if educators are empowered to take advantage of the technologies and methodologies available to them.

The EdDiCo project aims at empowering individual educators to

a) identify the potential that technology holds to transform and improve the education they offer,
b) identify the digital competences they would need to acquire to take advantage of those technologies and associated methodologies;
c) find the educational resources necessary to acquire those competences.

The EdDiCo project started in September 2019 will end in August 2022.

Erasmus+



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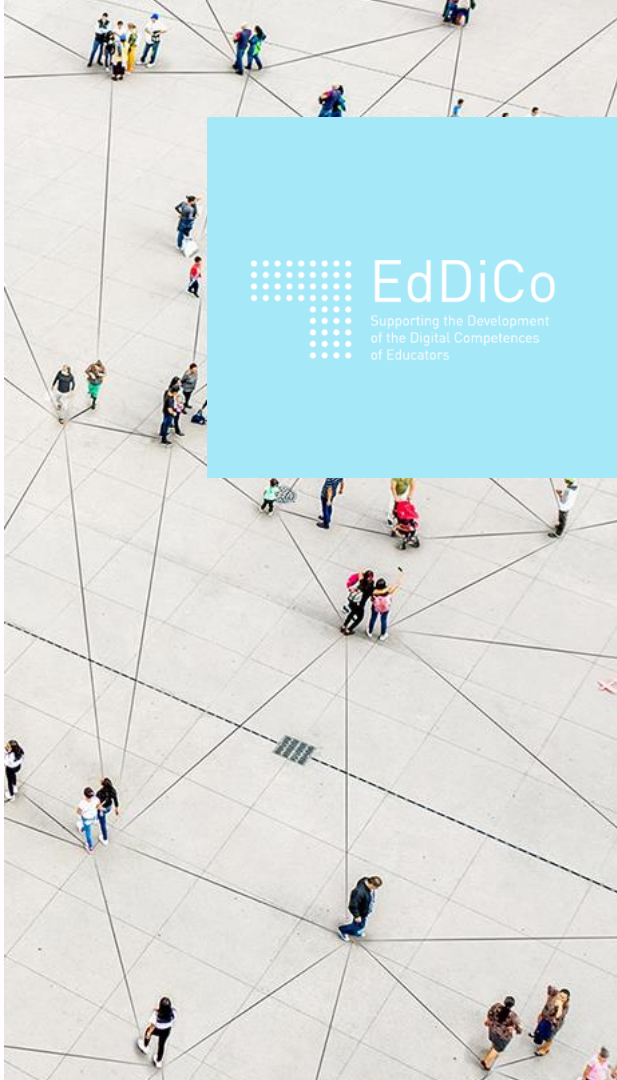
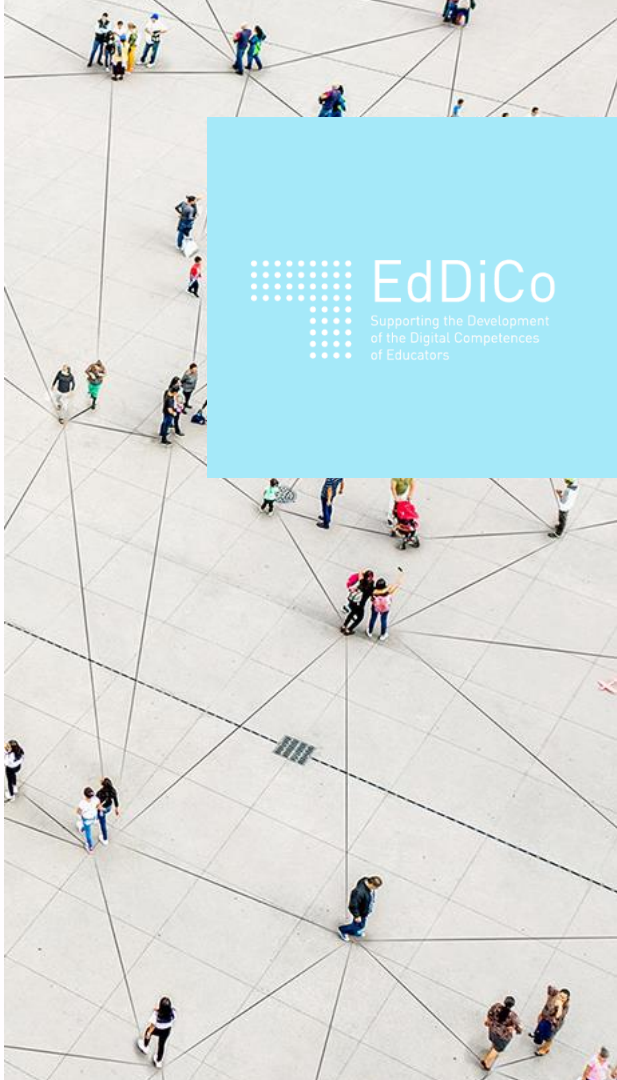


What we will do

1. Build a **Self-Assessment and Recommendation Tool** for Digital Competences of Educators
   Challenges:
   - Problem-based assessment (as opposed to self-attribution of competence levels or achievement-based assessment)
   - Automated assessment

2. Build a **Directory of Learning Opportunities** and Educational Resources for Digital Education
   - Based on the self-assessment and the individual learning goals, the tool will suggest adequate (open) learning opportunities

3. To do this, we need a
   Learning Maturity Model for Digital Education Competence
   Based on
   - A review of Digital Competence Frameworks for Educators
   - DigCompEdu
   - Tuning/Calohee



First result: Report on Needs and Expectations of Educators on Digital Competences

The purpose of this investigation was to better understand the main target group (HE teachers) of the project and their needs in terms of digital competences.

- What do they need?
- What do they want?
- What do they use?
- How do they learn?
- How do they develop certain competences?
- How do they relate to digital tools?
- Are they familiar with digital competence frameworks?

n= 19

Semi-structured interviews carried out between January 2020 and March 2020 in Italy, Germany, Finland, Lithuania and Spain, before as well as during the Covid-19 related shift to online learning and teaching

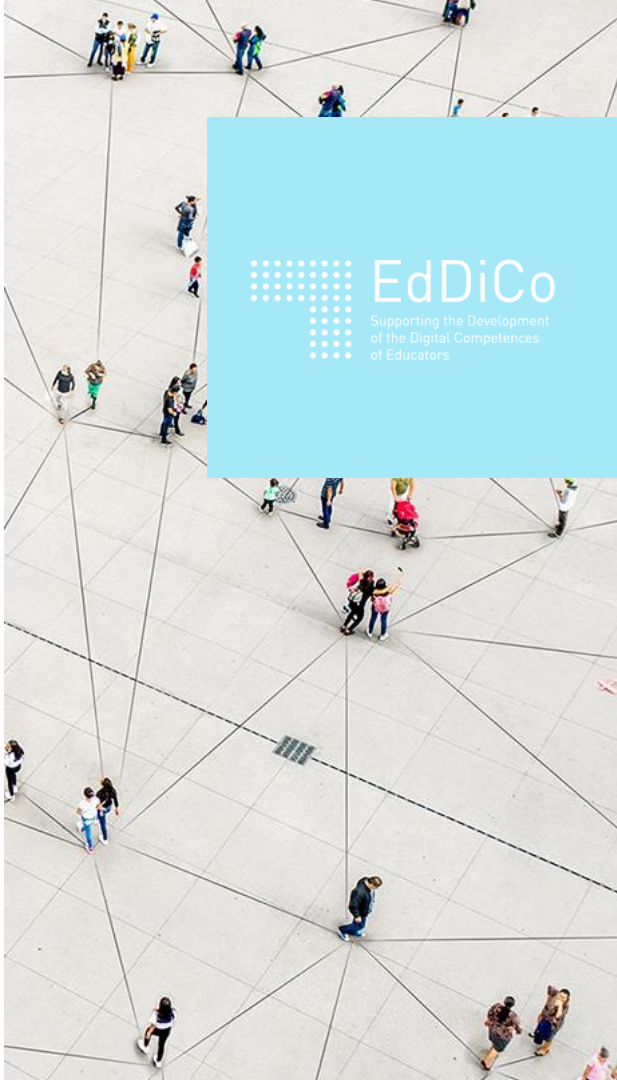


Image by Alexi Lamm from Pixabay

All Levels of Learning, Teaching and Administration are affected by Digitisation

Impacts on the university system

Teaching environment

Little teacher training

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- Self-learning
- Learning with peers

Study environment

Personalised and flexible learning
Collaborative activities

↓

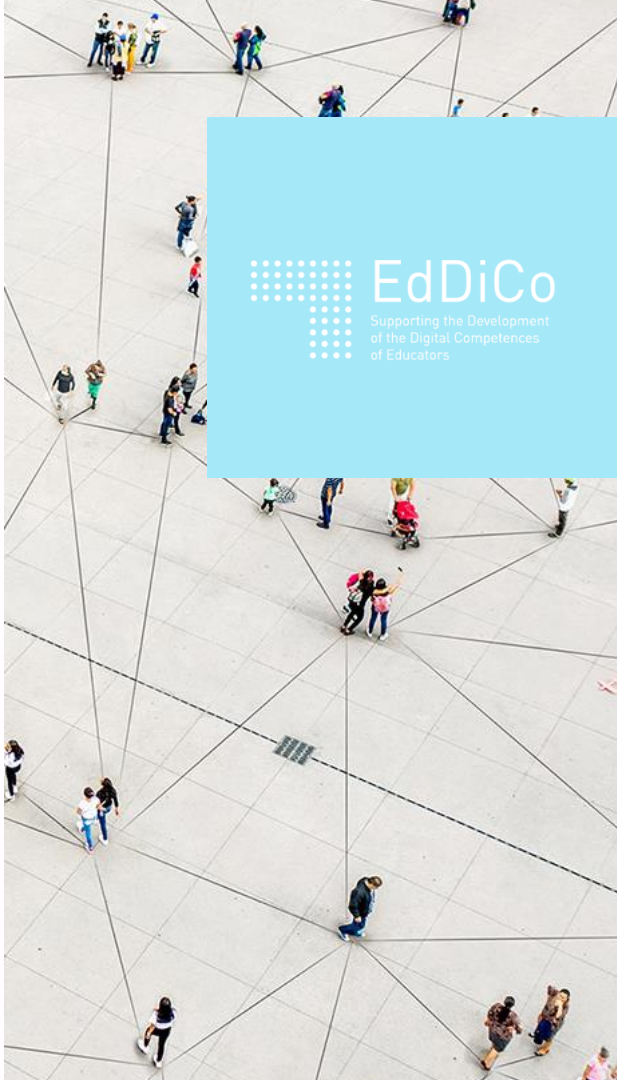
- Active learning
- Soft-skills development

University administration

Has to spped up the digitalisation process

↓

- Changing of the procedures
- Improving the efficiency



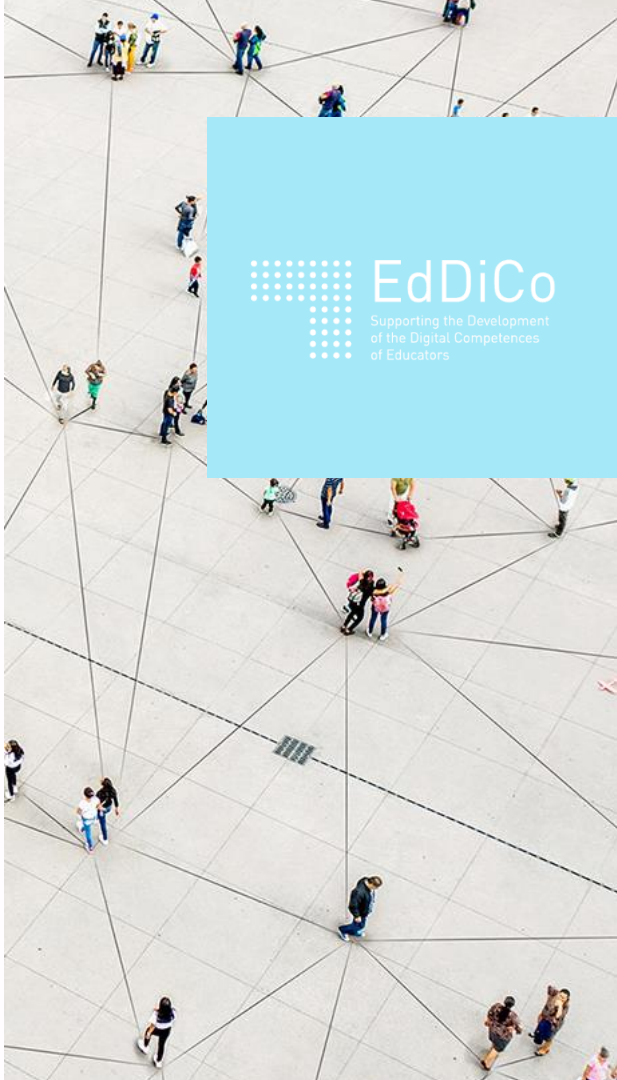
Informal and peer-based learning dominates

Development of digital competences

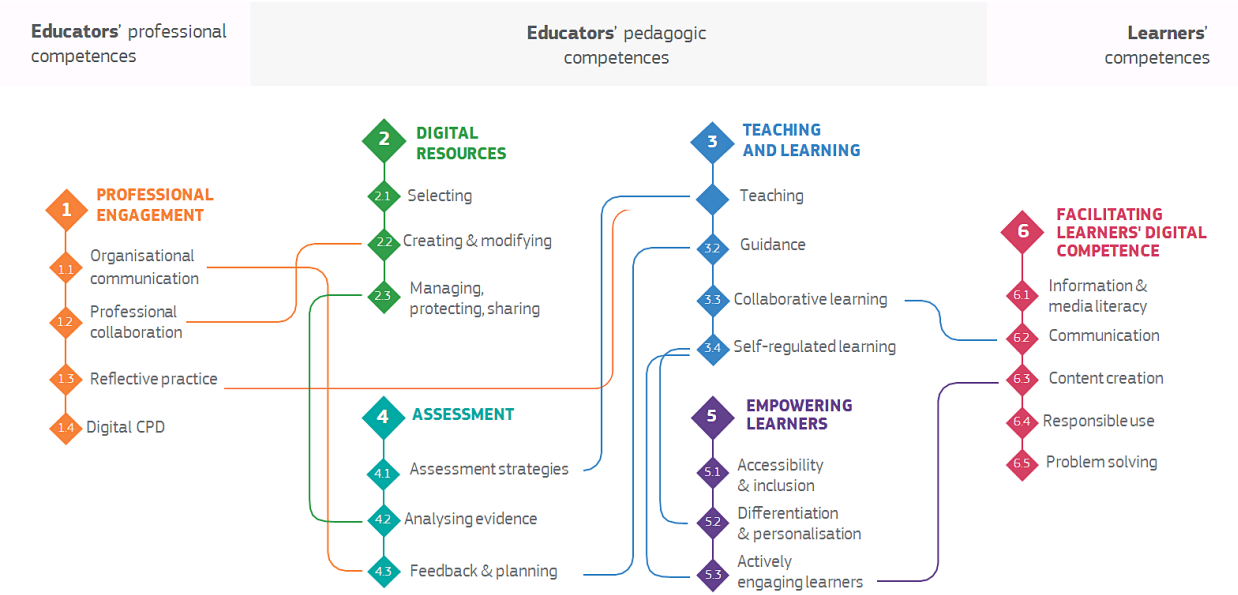
Teachers are reluctant to enroll in specific courses ⟶ due to ⟶ Lack of time
Lack of incentives

They prefer:

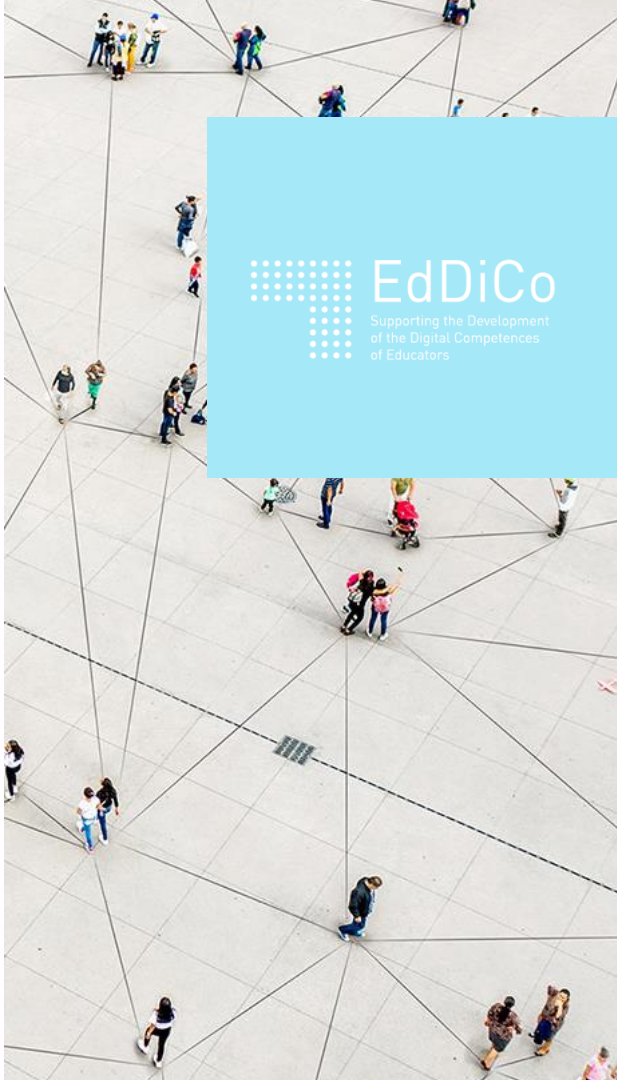
- **learning by doing**
- **problem-based learning**
- **collaborative learning**
- **self-training** ⟶
  - MOOC
  - web search
  - participation to national and international projects and conferences



Digital Competence Frameworks are not very well-known



Source: https://ec.europa.eu/jrc/en/digcompedu/framework



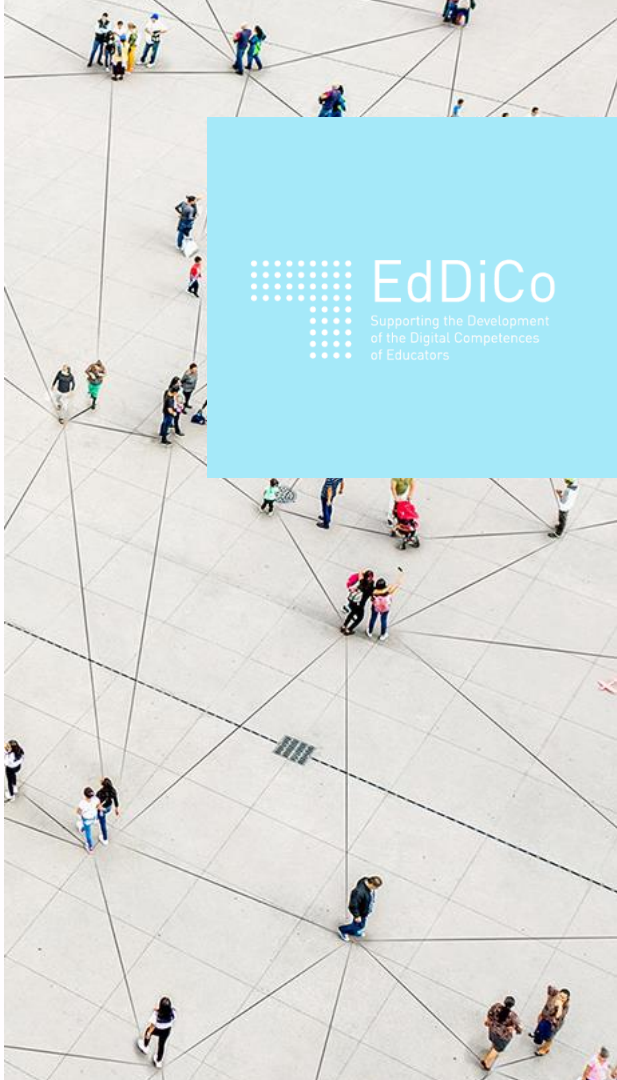
Feeling Lost

“There are many resources on the internet, but teachers do not know how to select the most appropriate content for our subject.”

[Political Science Teacher, Spain]

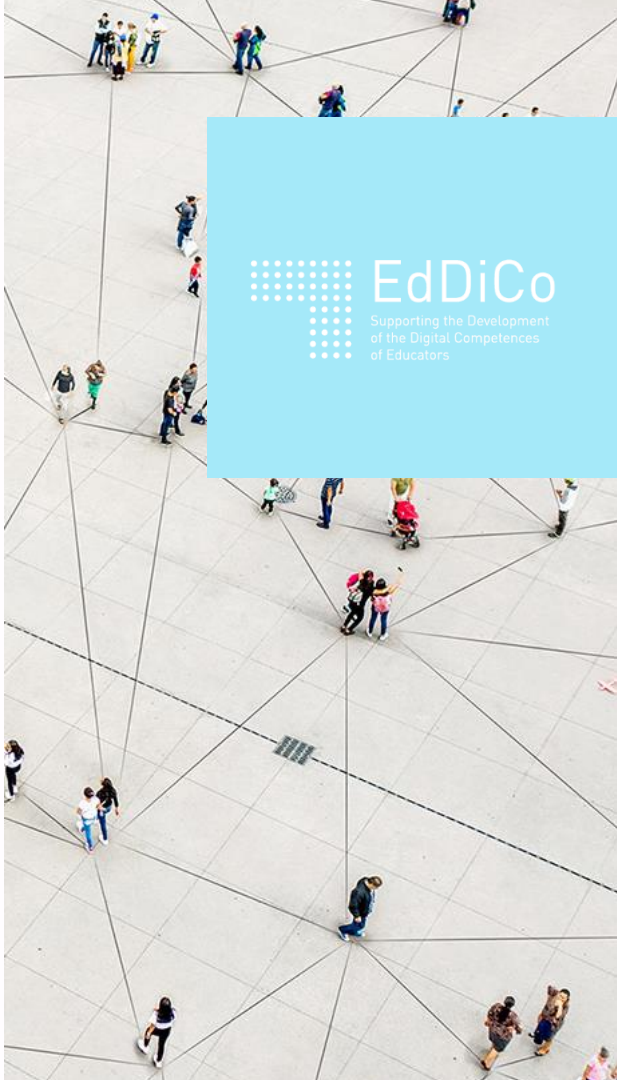
The main finding is the overall sensation of feeling lost among all the digital opportunities ‘out there’.

The lockdown accelerated this process even more, to the point that **even experienced teachers are now struggling with new software solutions they are required to use**, in some cases replacing those they were used to.



In Need of Orientation and Guidance to…

- Improve teaching, assessment, and professional development;
- Acquire a specific digital literacy to better understand the technical terms of a web research, so that the experience can be useful and not frustrating because of its incomprehensibility;
- Become a “digitally competent teacher”: having competences in communication, collaboration, content creation, student empowerment;
- Know LMSs or platforms in general, not only those provided by the university they belong to;
- Be able to manage video production and editing;
- Search for educational content and innovative teaching methods.



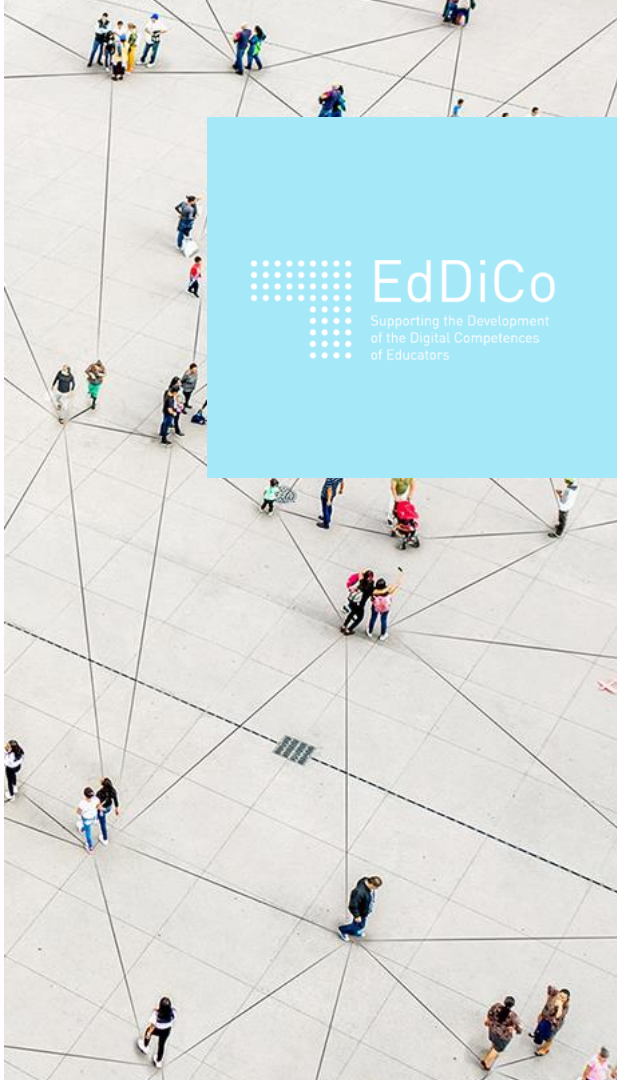
Lack of Incentives for Competence Development

“When I take a continuing professional development course (CPD), then I still have to do the same amount of teaching, so my to-do list just gets longer. This is why I carefully judge whether I actually need this CPD course or not. Already now I am in a situation that I know how I could improve my teaching, but this would require that I put more time and effort into it, which I cannot afford to do because of other obligations.”

[University Professor, Germany]

One big obstacle that is keeping educators from taking part in CPD courses to develop their competences, digital or not, is that their remuneration is tied to their teaching obligation, not to the hours of work per week.

In Germany, a school teacher has to teach between 23 and 28 hours per week, and a full-time professor between 9 and 18 hours per week during the semester, regardless of the amount of time they put into the preparation of the classes. This leads to a situation where many of the professors have the feeling that they have to use their free time to develop their competences. They face a trade-off in devoting their extra time between better preparation of their classes and developing their digital competences. This helps to explain the relatively low participation rates in CPD courses among educators.



Learning and Teaching Modes

Synchronous

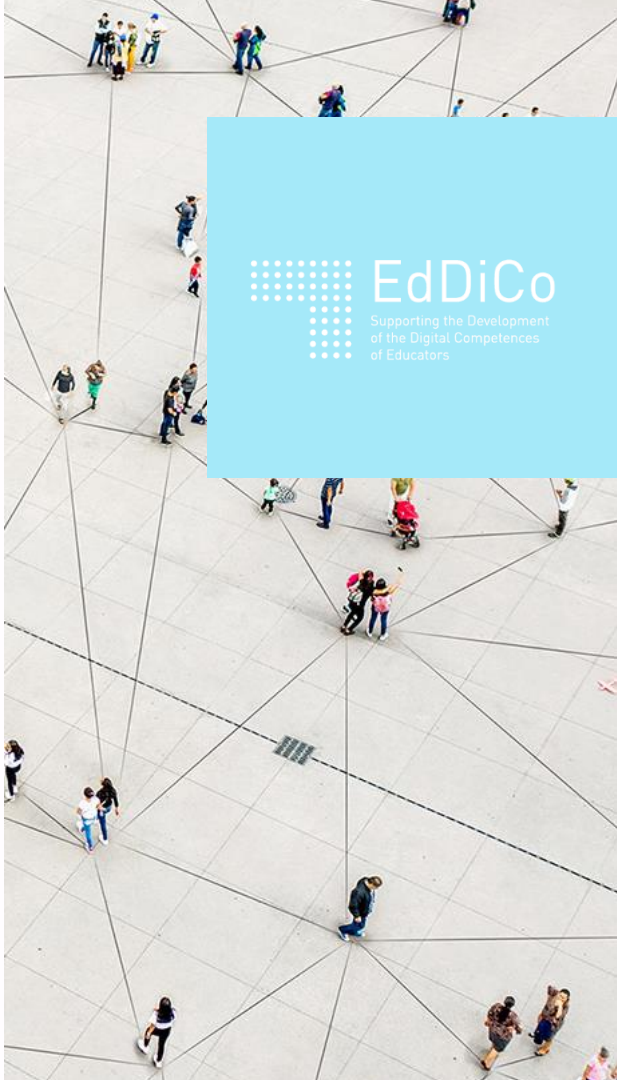
“We're all jumping in at the deep end. It's the best way to learn something new. Last Wednesday I taught my first 8 hours lesson on Zoom. I put a flipchart behind me, but I realised that I have to get a thicker pen for better readability. The breakout sessions option is great: I can randomly create subgroups for short workshops of, for instance, 15 minutes, then get back to the plenary. I think we did great.”

[Management University Professor, Germany]

Asynchronous

Digitalisation has a major impact on the study environment and makes teachers much more flexible in their study process. More collaborative activities appear to be attractive to students, and more convenient results can be created in the study process.

[Management Teacher, Lithuania]



Opportunities of Digitization

Virtual Reality

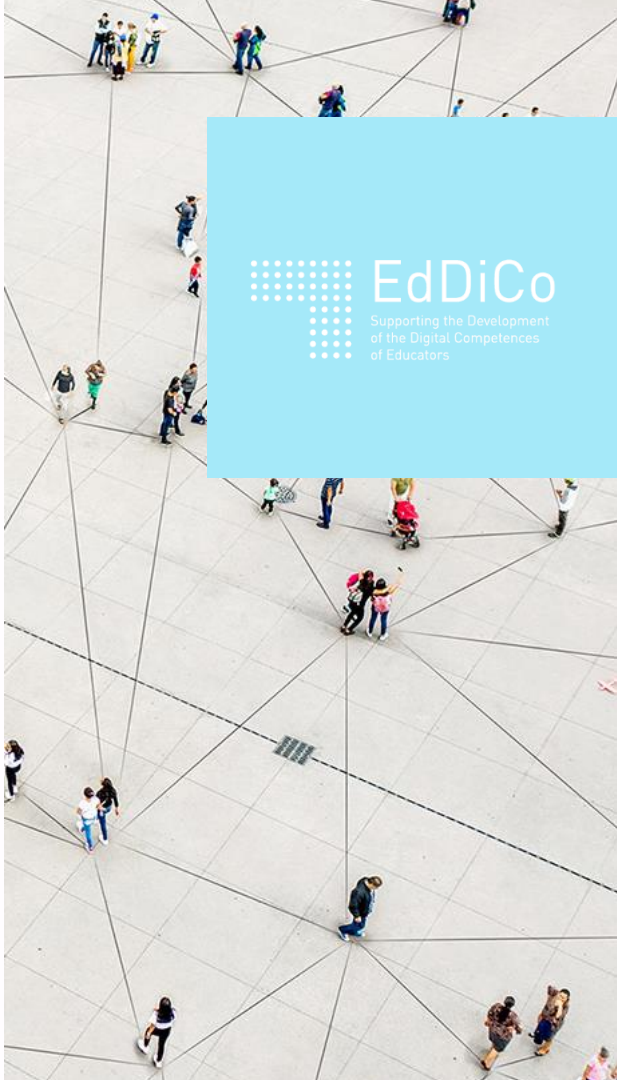
“The software systems that allow simulation with virtual, immersive reality and data processing have a very strong (and very positive) impact on teaching and learning. They are extremely useful, as in most cases a real visit [to a chemical plant] is not possible: industrial secrets, equipment, danger... It is more like "feeling the perfume": you cannot see everything and you cannot try anything. With virtual reality, you can.”

[Chemistry Engineering University Teacher Italy]

Delicate Questions

“I use digital media as a method to strengthen the self-esteem of young adults and to facilitate their exchange of ideas and experiences, and also to address topics which would be difficult to address in personal discussions. Example: ‘How does chronic disease affect family planning or career plans?’”

[Trainer/Facilitator, Germany]



Transformative Power

Impact

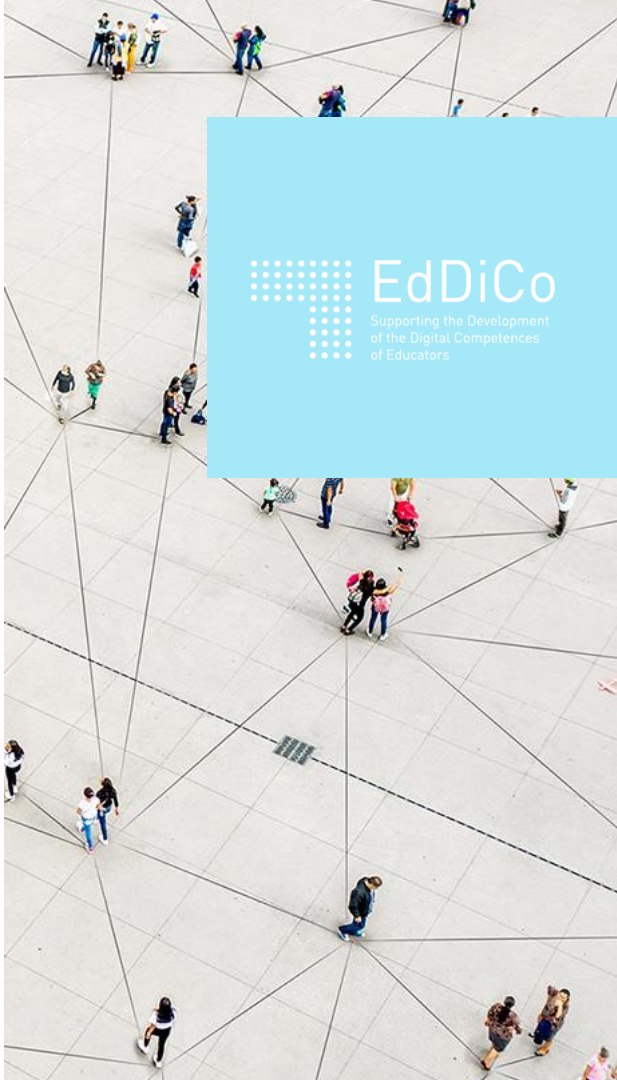
“Digital transformation impacts all different university roles: teachers, administrations, students.”

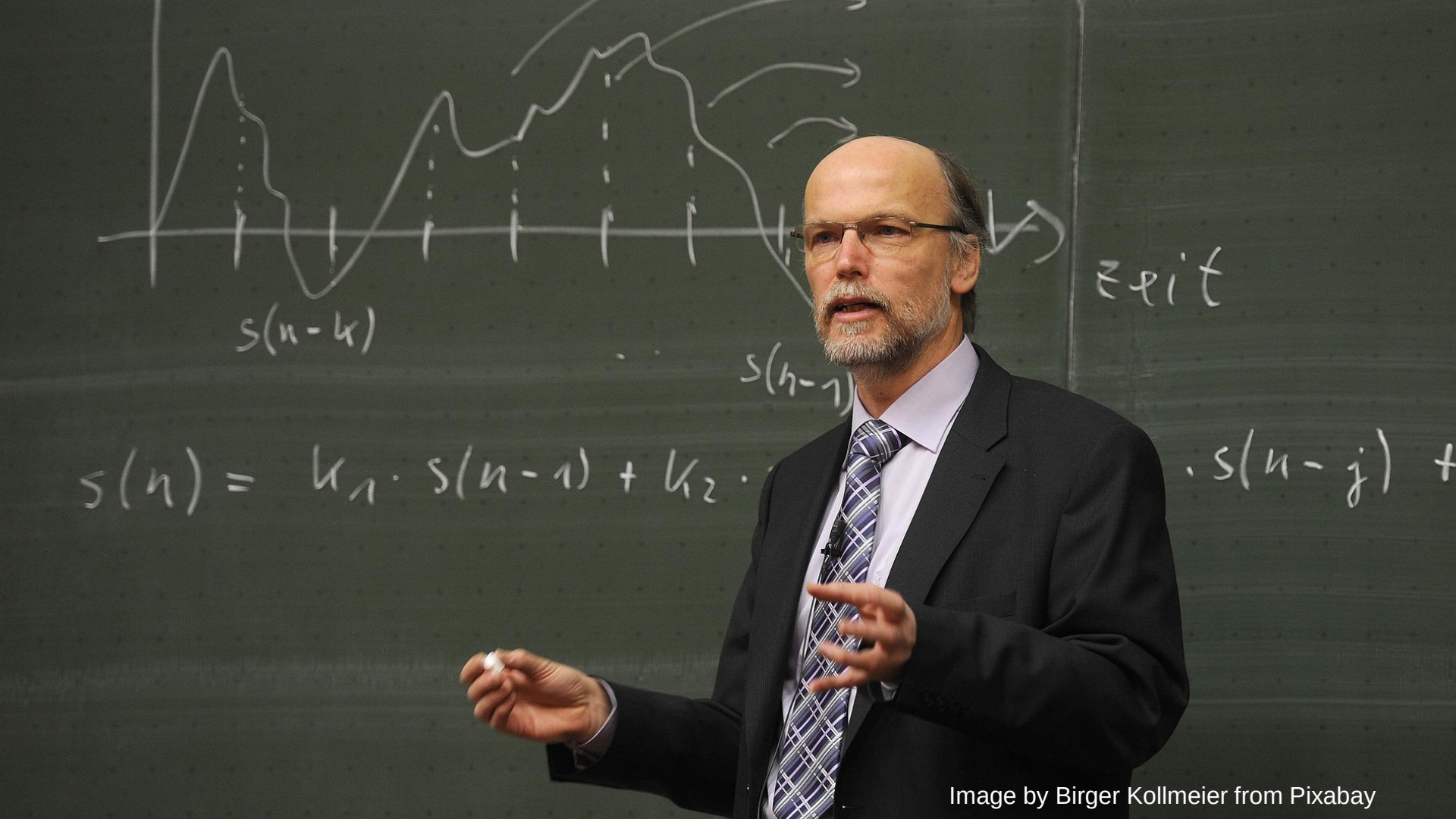
[University Professor, Italy]

Curiosity

“Teachers explore new digital tools and possibilities of personalized and mobile learning and introduce them in their classes.”

[Adult Learning Teacher, Lithuania]





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THANK YOU FOR YOUR ATTENTION

Jochen Ehrenreich
jochen.ehrenreich@heilbronn.dhbw.de

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