

Digitally competent educators

Prof. dr. Airina Volungevičienė
Vytautas Magnus University, EDEN

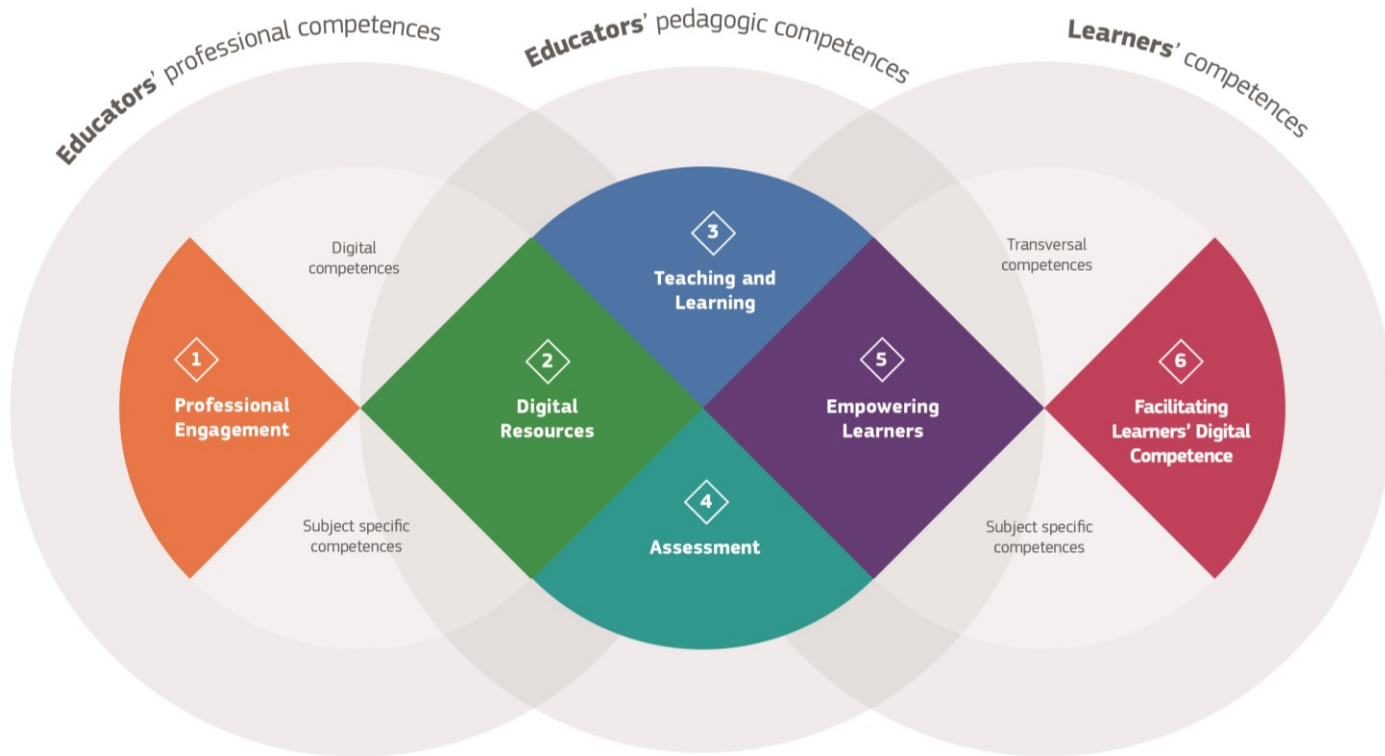
in cooperation with dr. Estela Daukšienė
Vytautas Magnus University



Education 360°



DigCompEdu: 6 areas



DigCompEdu: 22 competences



Educators' professional competences

1 PROFESSIONAL ENGAGEMENT

- 1.1 Organisational communication
- 1.2 Professional collaboration
- 1.3 Reflective practice
- 1.4 Digital CPD

Educators' pedagogic competences

2 DIGITAL RESOURCES

- 2.1 Selecting
- 2.2 Creating & modifying
- 2.3 Managing, protecting, sharing

4 ASSESSMENT

- 4.1 Assessment strategies
- 4.2 Analysing evidence
- 4.3 Feedback & planning

3 TEACHING AND LEARNING

- 3.1 Teaching
- 3.2 Guidance
- 3.3 Collaborative learning
- 3.4 Self-regulated learning

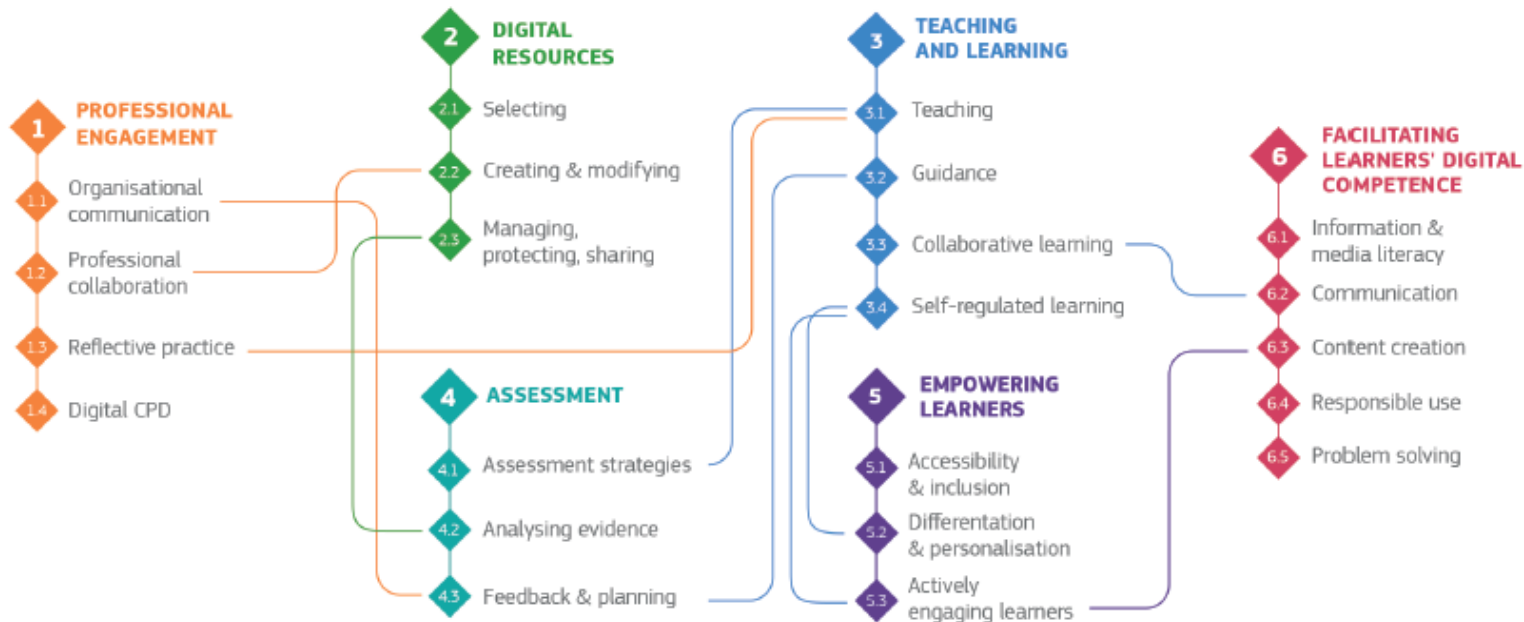
5 EMPOWERING LEARNERS

- 5.1 Accessibility & inclusion
- 5.2 Differentiation & personalisation
- 5.3 Actively engaging learners

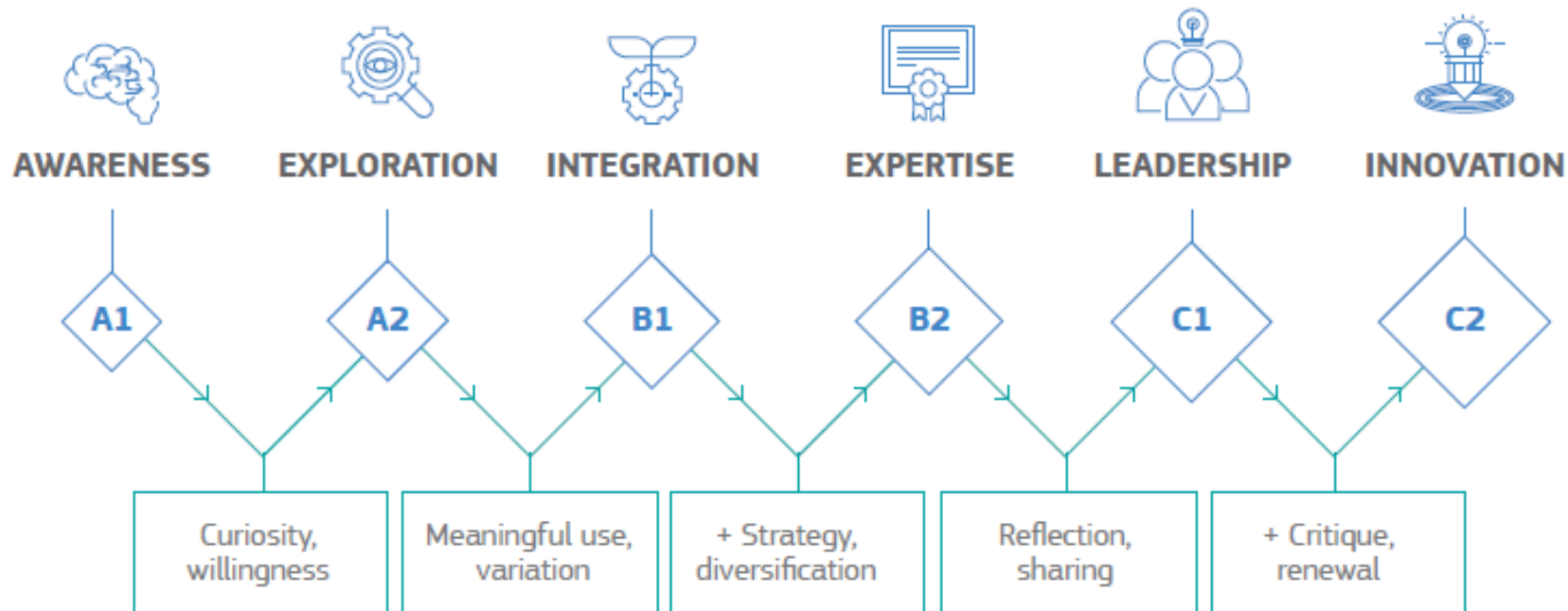
Learners' competences

6 FACILITATING LEARNERS' DIGITAL COMPETENCE

- 6.1 Information & media literacy
- 6.2 Communication
- 6.3 Content creation
- 6.4 Responsible use
- 6.5 Problem solving



Competence Progression



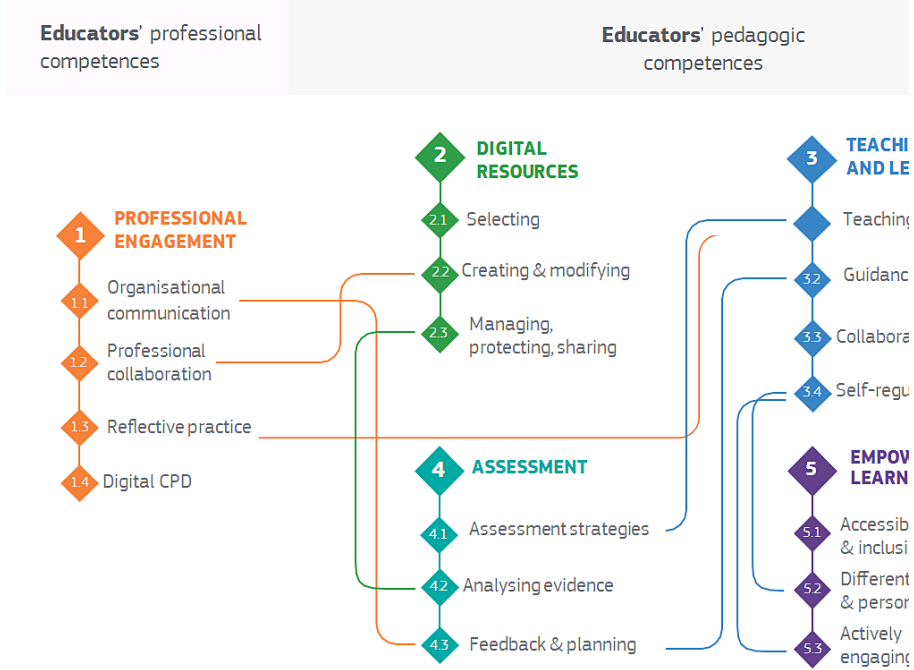
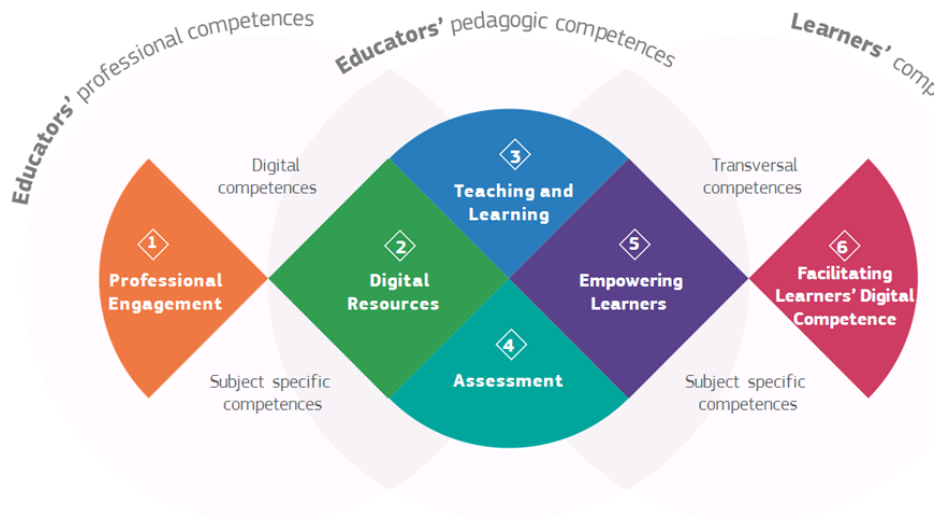
Development of teacher digital competences.
Case study examples.

Using best practice examples from H2020 program

Vytautas Magnus University (Lithuania)

- Classical *artes liberales* university, promoting creativity, arts and innovations, teaching 30 languages, globally oriented in studies, partnerships and research;
- Traditional (F2F) studies, but Moodle used for all courses;
- 15 academic divisions, ~ 10 000 students





4. Digital assessment

- 4.1. Assessment strategies
- 4.2. Analysing evidence
- 4.3. Feedback and planning



The European Commission has approved the **TeSLA** project (*Adaptive Trust-based e-assessment System for Learning*) to define and develop an **e-assessment** system to authenticate students and identify the authorship for learning activities on both, partially or wholly online learning environments.



This project has been co-funded by the HORIZON 2020 Programme of the European Union. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use, which may be made of the information contained therein.

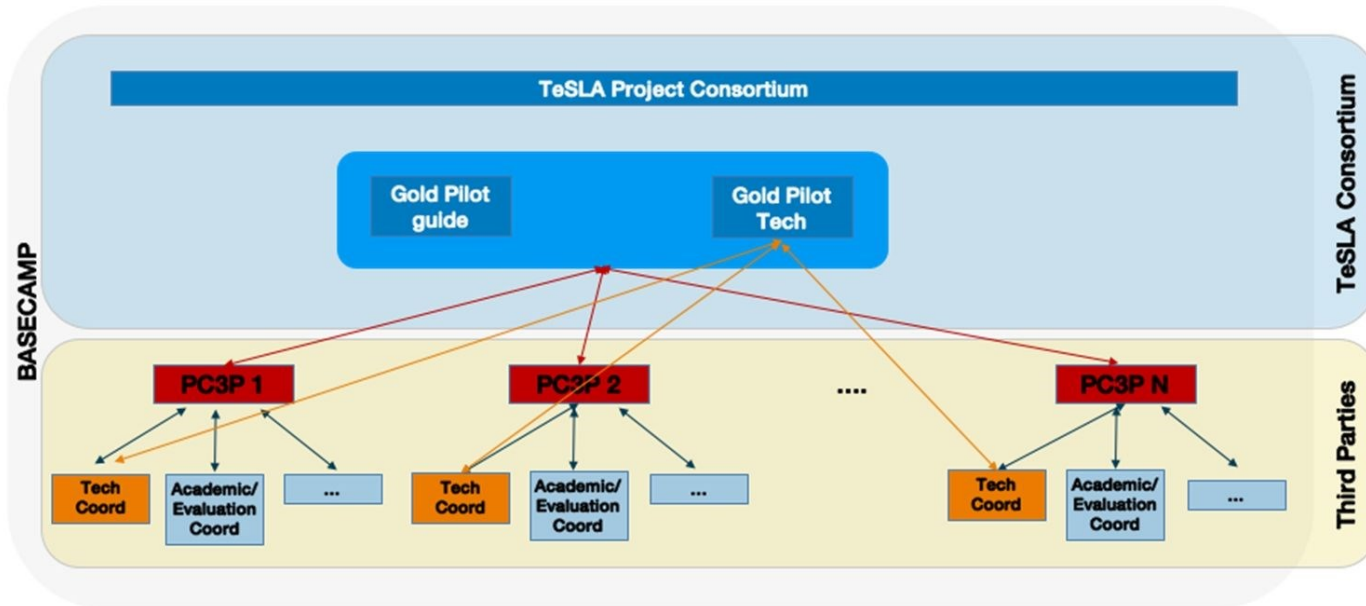


Funded by
the European Union

Project Number: 688520 – TESLA – H2020-ICT-2015/H2020-ICT-2015
Agreement Number: 688520



- Tesla pilot contract between Universitat Oberta de Catalunya (TeSLA Coordinator) and Vytautas Magnus University signed
- Innovative Studies Institute, Faculties and all teachers and students offered the possibility to test TeSLA tools



TeSLA PL: TeSLA Pilot Leader
PC3P: Pilot Institution Coordinator



PILOT PLANNING

- number of students
- number of SEND students
- number / type of courses
- LMS/VLE: type & Integration model if applies
- Number / type of TeSLA instruments to test.

PILOT START UP

- TeSLA integration with LMS/VLE
- TeSLA instruments set-up inside each course. Training for Teachers/tutors/Coordinators
- Teachers/tutors/Coordinators explain to students the pilot, etc.

PILOT EXECUTION

- Students sign consent about data privacy
- Students enrolments
- Students study as usual and make its assessments as usual
- Teachers evaluate and grade assessments using TeSLA feedback- REPORT



Funded by
the European Union

Project Number: 688520 – TESLA – H2020-ICT-2015/H2020-ICT-2015
Agreement Number: 688520

What

Authentication

- Voice Recognition
- Keystroke Dynamics
- Face Recognition
- Forensic Analysis

Authorship

- Forensic Analysis
- Plagiarism

Confidence

- Face Recognition Anti spoofing
- Voice Recognition Anti spoofing
- Time Stamping

When

During activity

- Face Recognition
- Face Recognition Anti spoofing
- Voice Recognition
- Voice Recognition Anti spoofing
- Keystroke Dynamics

After activity

- Face Recognition
- Voice Recognition
- Forensic Analysis
- Plagiarism
- Time Stamping

Biometric profile

Required

- Face Recognition
- Forensic Analysis
- Keystroke Dynamics
- Voice Recognition

None

- Face Recognition Anti spoofing
- Voice Recognition Anti spoofing
- Plagiarism
- Time Stamping



Marius Šadauskas

Informed Consent

Please read below information and decide whether you consent to use of the TeSLA system.

This browser does not support inline PDFs. Please download the PDF to view it: [Download PDF](#)

- * I have received all the necessary information to understand the purpose of the TeSLA system and I have had the opportunity to ask for additional information. I give permission for photographs/video/sound recordings and typing characteristics of me to be captured and processed to verify my identity and/or authorship of my written assignments.

Accept

Reject

Privaloma užpildyti laukus, kurie pažymėti* .



Funded by
the European Union

Project Number: 688520 – TESLA – H2020-ICT-2015/H2020-ICT-2015
Agreement Number: 688520



Face Recognition

Here we will record images of your face. Please read the following instructions and watch the provided video before you start recording your video.

INSTRUCTIONS

Stand in front of your screen with a webcam facing towards you

It is important to make sure that:

1. The camera is correctly capturing the whole face without leaving any parts outside the image boundaries.
2. The camera is horizontally aligned with your face approximately at the same height as your eyes/nose.
3. Lighting conditions are reasonable (neither too bright nor too dark).
4. You follow the instructions on the video at a similar speed. The final duration of the video will be about 10 seconds.

When you are ready, click **Start** to start capturing the video. Once finished, click **Stop** to stop the recording. The activity screen will close automatically.

Cancel



Sending data



Correct Samples: 0

Total: 2

Errors: 1

VMU context

- Majority of blended study programs with testing and exams in institutional VLE
- Testing and exams are organized in institutional premises (computer classes)
- Testing and exams are organized online (remotely) for blended and online study programs



TeSLA project contribution



VYTAUTAS MAGNUS
UNIVERSITY
MCMXXII

1. Testing learner identification tools:
 - a. Integrating TeSLA tools with VMU Moodle
 - b. Training university teachers to use the tools (f2f training in computer classes)
 - c. Opening online testing with learner identification option for all teachers at VMU (with consultations at Innovative Studies Institute)
2. Introducing new possibilities of digital assessment strategies in University
3. Preparing recommendations for teachers and students for online testing and digital assessment strategies with learner identification and authentication options

<https://slidewiki.org>

SlideWiki Search Add deck English Sign In

Search for decks or people

[Sign Up](#) [Learn More](#)

Find slides
Explore the deck
SlideWiki provides open educational resources and courses across a wide range of topics and education levels. Slides and presentations can be reused and adapted to suit your needs.

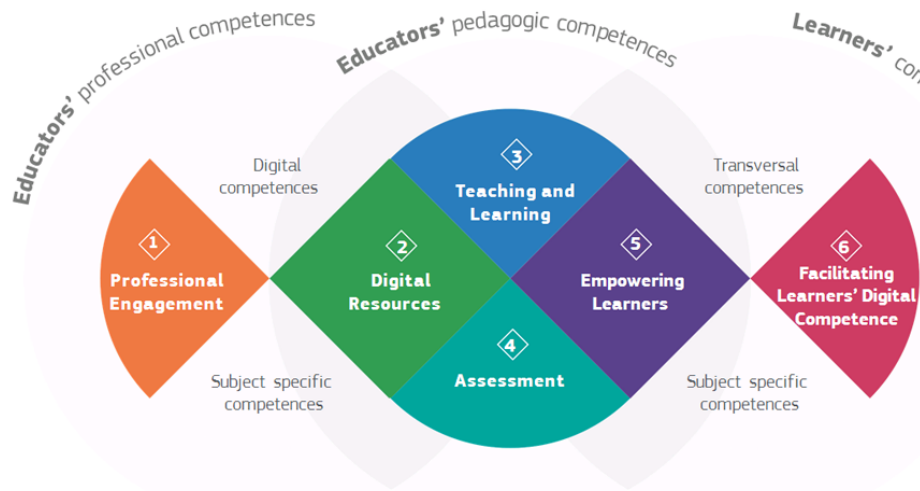
Create slides
Add and adapt course material
Create a new deck or import existing slides from PowerPoint (*.pptx) or OpenDocument Presentation (*.odp) files. Your imported slides will be converted into HTML slides to allow you to continue to edit and add new slides.

Share slides
Present, Share and Communicate
There are many ways that you and your students can engage and interact with slides and decks. Use the Slideshow mode to view a deck as a slideshow. Includes a timer and speaker notes' view. Share decks via social media or email.

Get started right away. [Sign In](#)

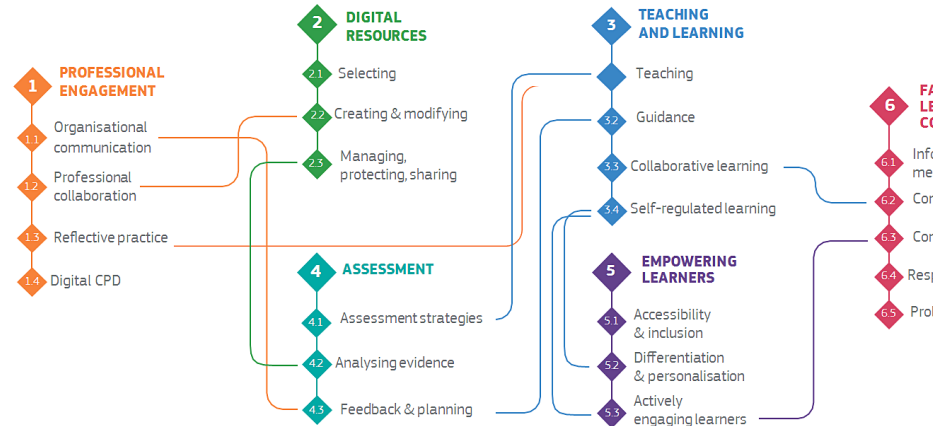
Create an account to start creating and sharing your decks.

The SlideWiki project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 688095



Educators' professional competences

Educators' pedagogic competences



OER development: 2.1 selecting
2.2 creating and modifying
2.3. managing, protecting, sharing

Idea for OER development

- Promoting teacher (and student) awareness on OER
- Testing a new platform
- Researching teacher attitudes and skills to develop OER



What and when was organized?

- Teacher trainings on OER and introduction to platform possibilities - April, 2018
- Teacher OER (open slides) creation and integration in blended and online courses - April – September, 2018
- OER testing with students – September - November, 2018



Results of the activity

- Teachers created open slides and integrated them in the online and blended courses
- The created open slides were used in courses as:
 - Online theoretical materials by teachers (*no active student engagement*)
 - Activities for students to promote student creation of open slides (*active student engagement*)



Platform possibilities

- OER creation and sharing with CC BY-SA license
- Find, create and share slides:
 - Create new from scratch
 - Import ppt and edit
 - Develop based on other's slides
 - Share as online or pdf file, like, download, collaborate...



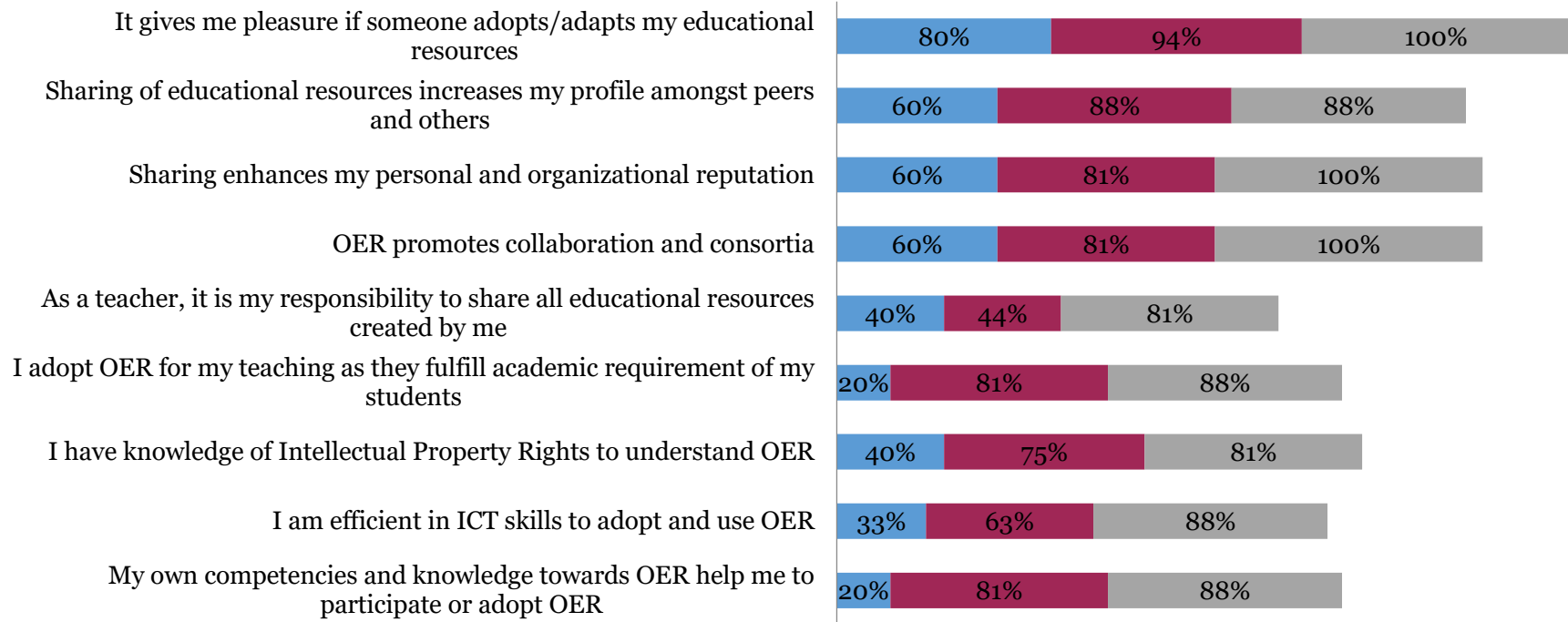
Implemented research

- Survey* (3 times) of 15 university teachers to test the attitude towards OER change
 - before OER development,
 - after OER development and integration in courses
 - after OER testing with students.
- Teacher interviews (after OER testing with students)



based on the ATOER questionnaire (developed, tested and validated by Mishra, Sharma, Sharma, Singh, & Thakur, 2016)

Research findings – the change in teacher attitude



■ Before development of OERs

■ After development of OERs

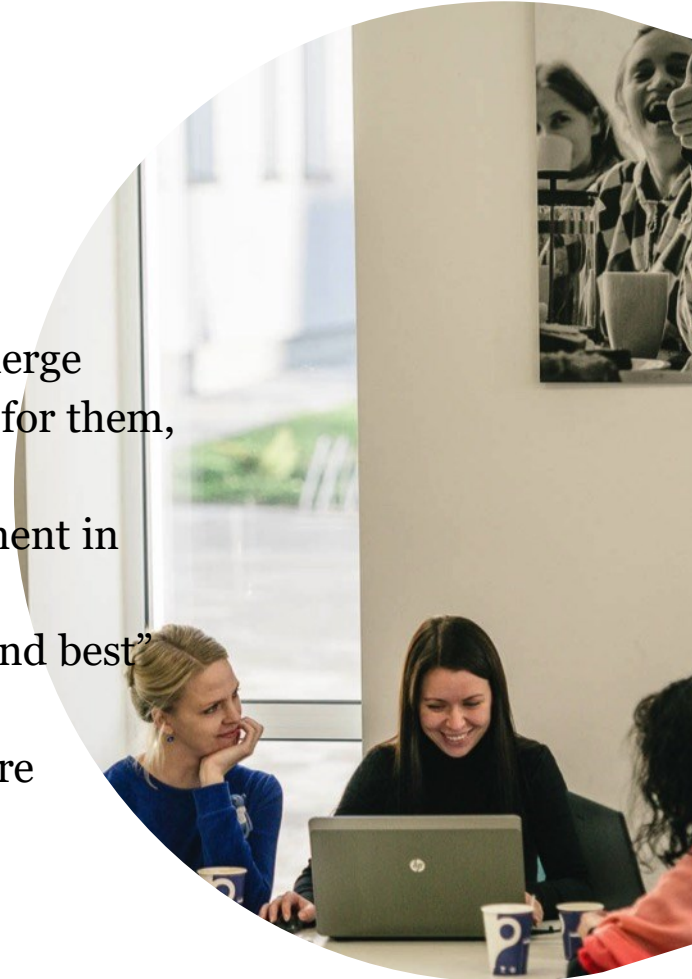
■ After OER testing with students



Research findings: teacher feedback (main ideas)

When integrating OER in courses:

- “same content is provided in a different way” (T15)
- new types of assignment or new learning methods may emerge
- “it is a new experience for students, ... more responsibility for them, on what they do, on what kind of works they share” (T8)
- “the tool and how I used it contributed to student engagement in the subject” (T6), “they became more active” (T12)
- “I got rid of the students’ attitude that I know everything and best” (T12)
- “I was more precise while quoting/citing and I noticed more student mistakes in citing” (T3).



*“students are more flexible
than we, teachers...”*
(a quote from teachers’ interviews)

To summarise

- Many interesting projects and collaboration provide impressive possibilities and outreach that we do not always are able to measure or predict
- Digital competences are developed in the framework of CPD programs, but also informally and on the spot – which learning lasts longer and happens deeper?
- We are not always aware of the competences we have until we discover them. Teaching and learning is not always of positivistic paradigm!
- One of the best characteristics of the research is the applicability of the research results. Applicability conditions differ and are difficult to predict, but experience and feedback is most important to identify our needs and preparations needed

Digitally competent educators



Education 360°

Prof. dr. Airina Volungevičienė
Vytautas Magnus University, EDEN

