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Developing Digital Skills for Teaching in HEIs

an experience from Aalto University

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Workshop agenda

14.20   Introduction and orientation to the theme

14.50   Introduction to digital learning in Higher Education

15.00   Working together: Benchmarking digital pedagogy and competences practices

15.50   Workshop ends

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Teacher Services

Orientation to theme: Digital Learning Statements

Individually: Answer statements

1. **Familiarize with digital learning statements in Presemo at presemo.aalto.fi/berlin2024**

   - **Rate them as**

     - Very urgent right now

     - Not important yet, but might be in the future, or

     - Irrelevant

   - **You can use the open comment field to elaborate your thoughts or leave questions**

   - **Answers are anonymous**

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presemo.aalto.fi/berlin2024
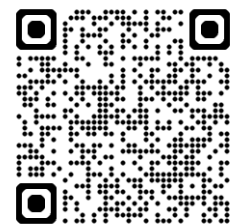
Share your thoughts

- **Which thoughts and impressions came to mind while answering the statements?**

Raise your hand

INTRO: Digital Learning & Pedagogy in Higher Education

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Teacher Services

University pedagogy in Finland

- Higher Education pedagogy is established, but edtech research has focused on technology rather than on learning theories

- Pedagogical courses support professional development in the universities. Teaching staff is research orientated and develop pedagogical competence along with teaching.

The Finnish Education Evaluation Centre's evaluation of the state and renewal of higher education pedagogy (2023):

- Higher education pedagogy must further strengthen aspects such as digitalization

Finnish perspective: promoting digital pedagogical solutions in higher education teaching and learning (FINEEC evaluation, 2023)
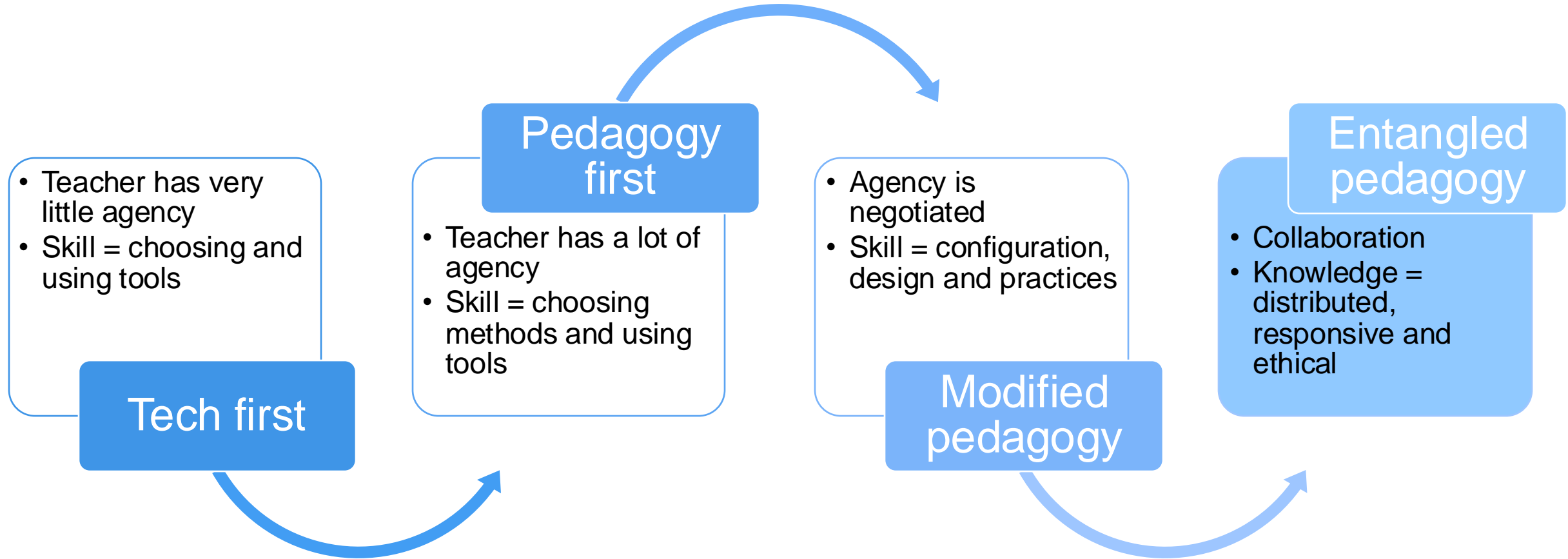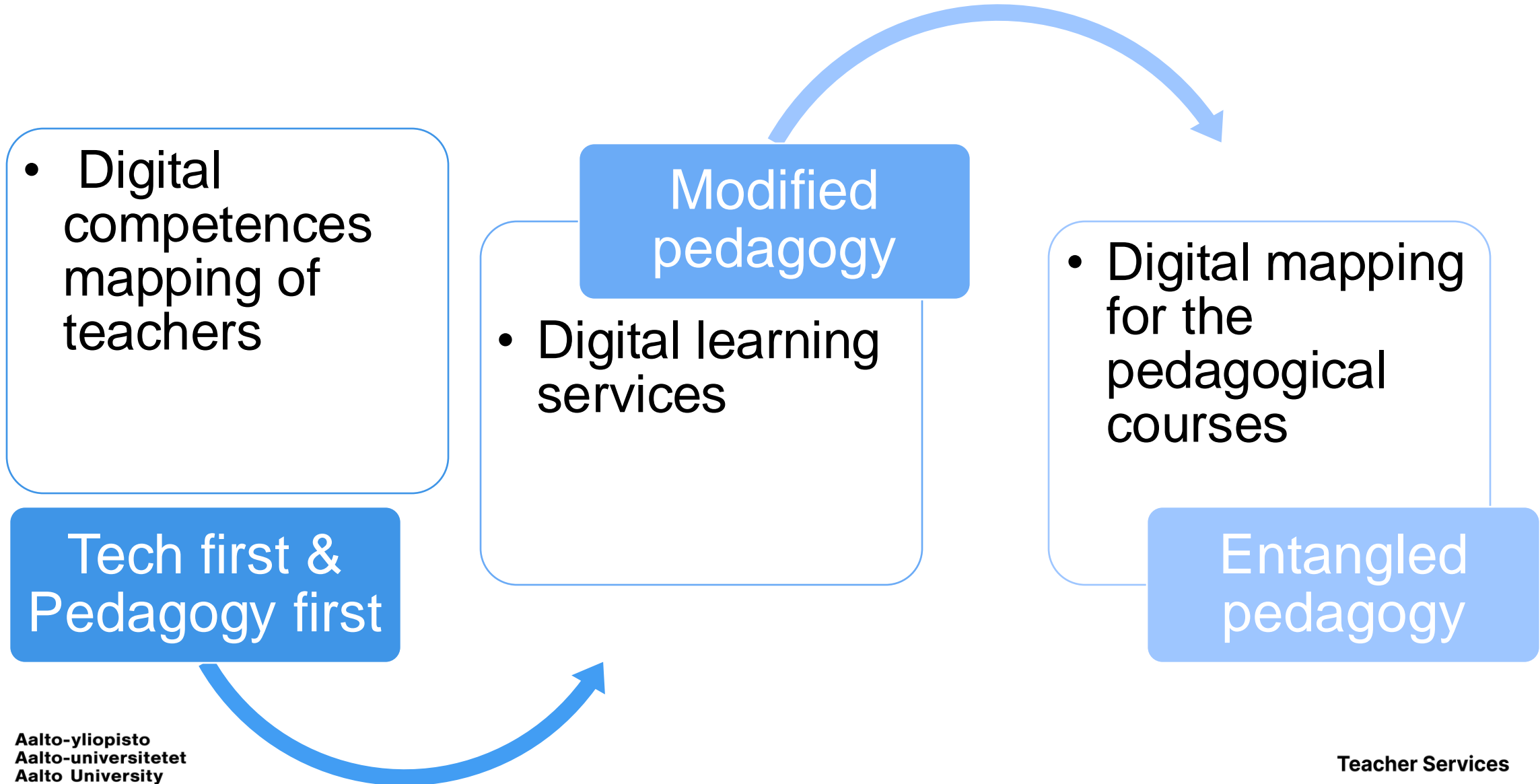

Not there yet:

- No quality criteria for online education*

- No digital solutions as a part of curriculum process

- Only two universities (out of 14) report having digital pedagogical instructions and recommendations

*National quality criteria, first version published 2023 l

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Framework for competence development: entangled pedagogy

Pedagogy first

Tech first

- Teacher has very little agency
- Skill = choosing and using tools

- Teacher has a lot of agency
- Skill = choosing methods and using tools

Modified pedagogy

- Agency is negotiated
- Skill = configuration, design and practices

Entangled pedagogy

- Collaboration
- Knowledge = distributed, responsive and ethical

Teacher Services

Adapted by Fawns, T. 2022

Small group theme for workshop

- Digital competences mapping of teachers

Tech first & Pedagogy first

Modified pedagogy

- Digital learning services

- Digital mapping for the pedagogical courses

Entangled pedagogy

Adapted by Fawns, T. 2022

References and materials available in material bank
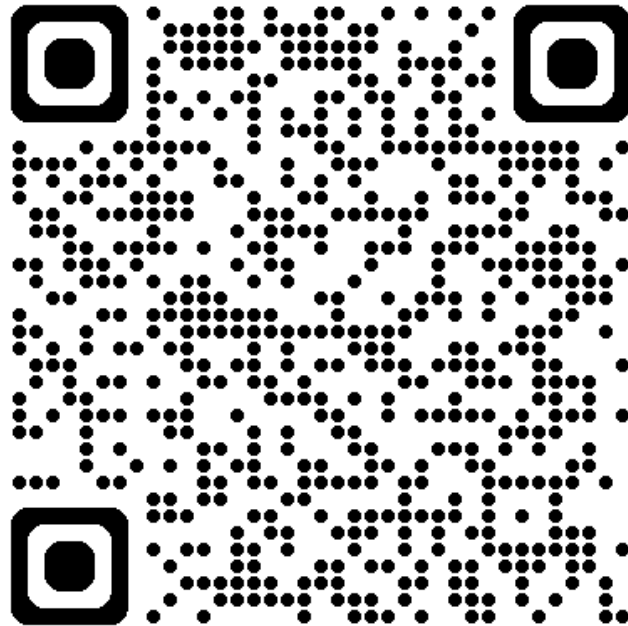
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Digital Learning support at Aalto University

Digital Learning at Aalto in a nutshell

- Digitalization is a path to sustainable teaching at Aalto

- Digital learning is encouraged in the university strategy but also with concrete technical solutions that make usage easy

- Blended teaching is widely spread at Aalto

- Specialized digital learning support is offered at the University but also at the Faculty (i.e. School) level

- Support services are offered synchronously and/or on-demand (e.g. live consultations and demos, support ticketing system, trainings) and asynchronously (e.g. ticketing system, tutorials, blogs, wiki pages, recordings)
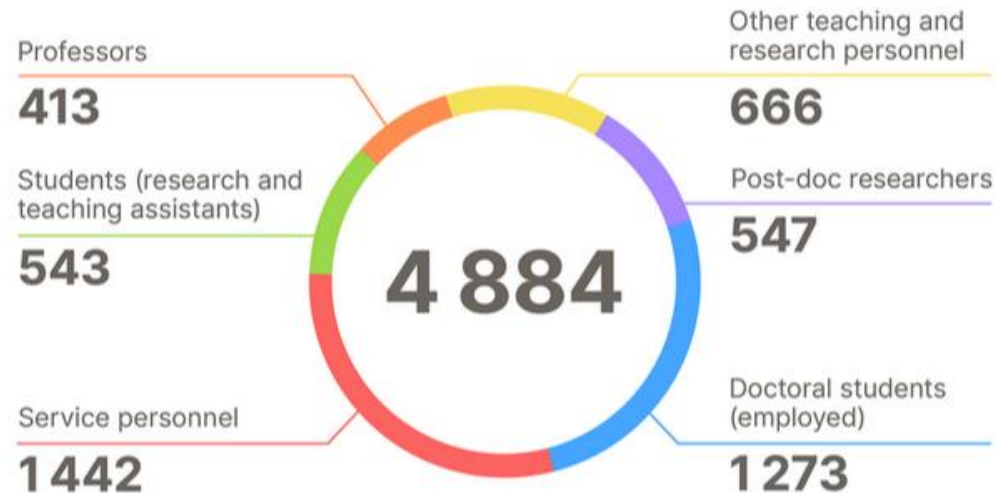
Aalto University's Key numbers

Students

13 941 (FTE)*

7 475 bachelor's students, of which 711 are international

6 466 master's students, of which 1 936 are international

* Full-time equivalent degree students.

Degrees in 2023

1 614 Bachelor's degrees

2136 Master's degrees

230 Doctoral degrees

Staff

4 884

Professors 413

Students (research and teaching assistants) 543

Service personnel 1 442

Other teaching and research personnel 666

Post-doc researchers 547

Doctoral students (employed) 1 273

Aalto University is the 1st higher education institution in Finland to receive
the level 'excellent' from all evaluation areas
in the quality system audit of the
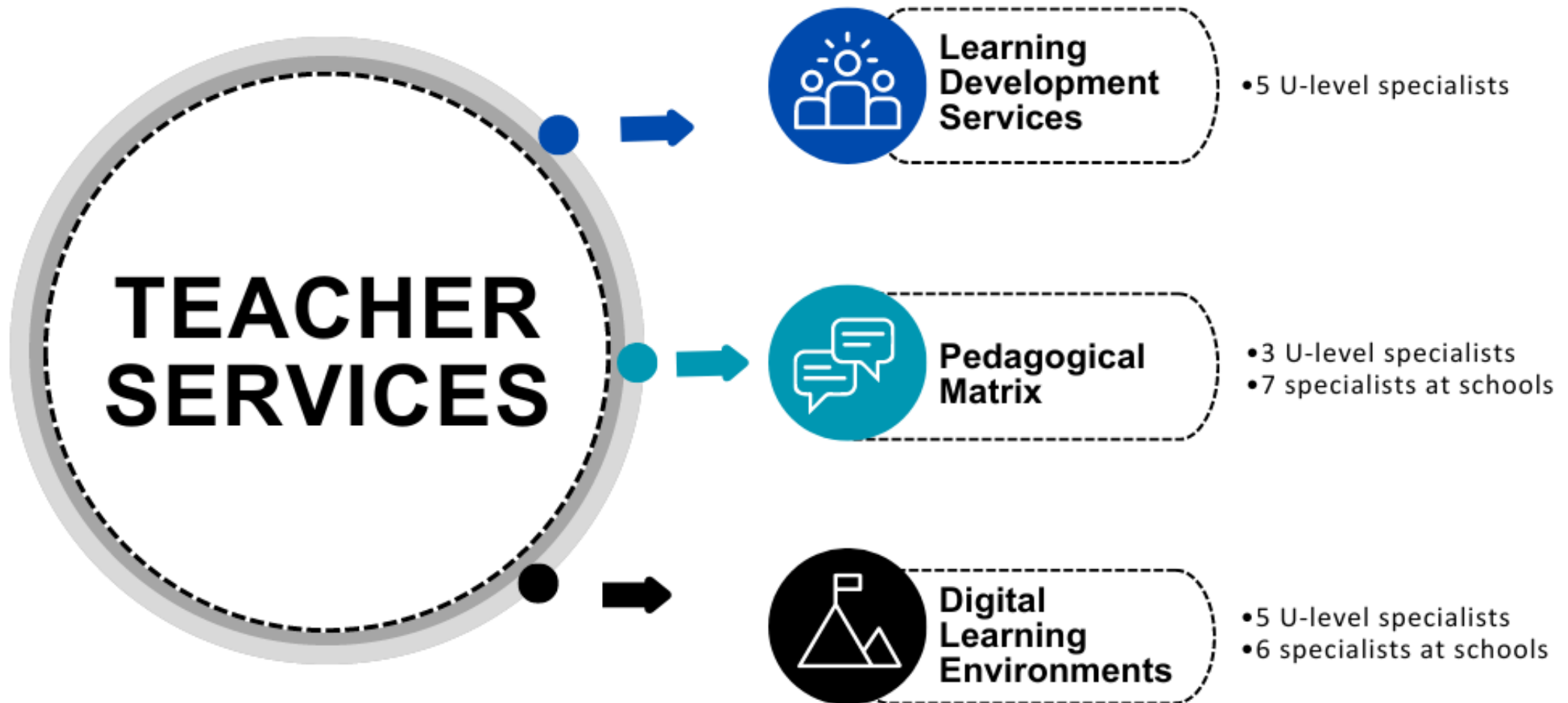Finnish Education Evaluation Centre (FINEEC)
in April 2023

Education Strategy

Aalto's long-term purpose: We spark the game changers of tomorrow

Focus of development: Future-led learning

Actions:
- Renewing educational offering
- Developing our digital and engaged learning environment,
- Integrating sustainability and multidisciplinary studies into programmes
- Advancing learning-centricity
- Focusing on holistic wellbeing

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Teacher Services combines pedagogy with digital and physical learning environments and development.

TEACHER SERVICES

Learning Development Services
- 5 U-level specialists

Pedagogical Matrix
- 3 U-level specialists
- 7 specialists at schools

Digital Learning Environments
- 5 U-level specialists
- 6 specialists at schools

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Services

The goal of Digital Learning Environments unit at Aalto is to support teaching staff in finding *meaningful ways* to integrate technology into teaching and learning

Teacher Services

Why is digital teaching so widespread at Aalto?

Strategy	Both the university and faculty-level strategic goals address digitalization
Technical reasons	Every course has an automatically created workspace on Aalto's Moodle (MyCourses). Students are automatically added to their respective Moodle courses.
Versatile tools	There are tools to support different aspects of teaching, most available on Aalto's Moodle Teachers find **all solutions in the same place**, avoiding extra work of transferring students to different systems.
Blended teaching	Most of the courses at Aalto adopt a blended strategy, e.g. **Material sharing** primarily done online and **electronic assessment** is widely used. There are **digital tools to support teaching in the classroom** and hybrid sessions and most classrooms have **user-friendly AV systems,** with ready-to use cameras, mics and speakers also ready to use

Digital learning services for teachers

| MAINTENANCE AND DEVELOPMENT OF DIGITAL LEARNING ENVIRONMENTS | TRAINING AND CONTINUOUS SUPPORT | ASSISTANCE IN ONLINE AND BLENDED COURSE DESIGN | SPECIAL TEACHING ARRANGEMENTS (E.G. HYBRID TEACHING) | PRODUCTION OF EDUCATIONAL AUDIOVISUAL ELEMENTS |

Book a Specialist

Events and Training

Self-study

Opit Blog
Opit Wiki guides
Teachers' Handbook
Teachers' Weekly Newsletter

MyTeaching Support

System ownerships

Aalto Studios

School-level support

Digital learning services per usage, estimation

1

Self-study resources

Consultations and tickets

Trainings and events

Special teaching arrangements

AV at Aalto Studios

The area size represents the estimated difference in usage rates compared to other services.

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Teachers' digital competences development

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Key terminology

Digital pedagogical competence refers to the ability to use technology to support teaching and learning in face-to-face, blended and online learning settings.

Educational technology refers to softwares and tools that are used in teaching related tasks and are centrally support by the university, e.g. Learning management systems, interaction and assessment tools

WHY

- The School of Chemical Engineering wanted to **strengthen university teachings staffs' digital pedagogical competencies.**

GOAL

- Develop the capacity of university teaching staff at using educational technologies in a **learner-centered** and **meaningful way** in teaching, learning and working.

METHODS

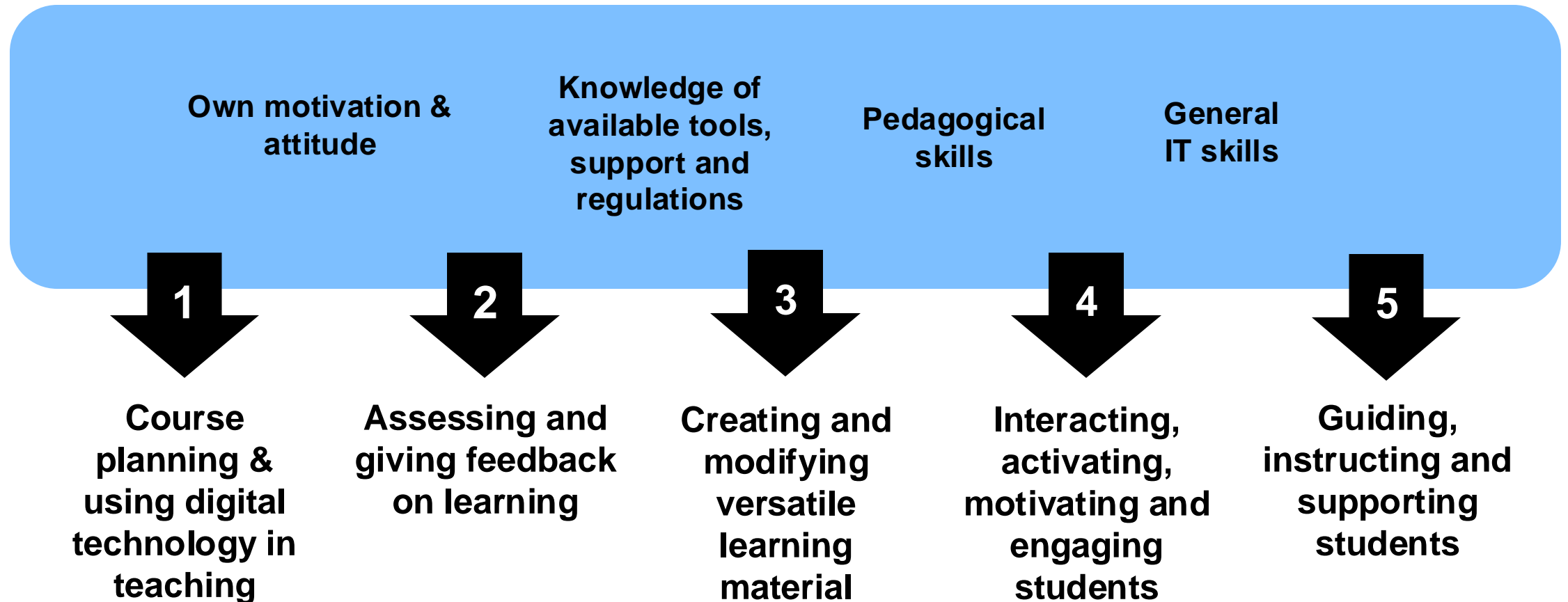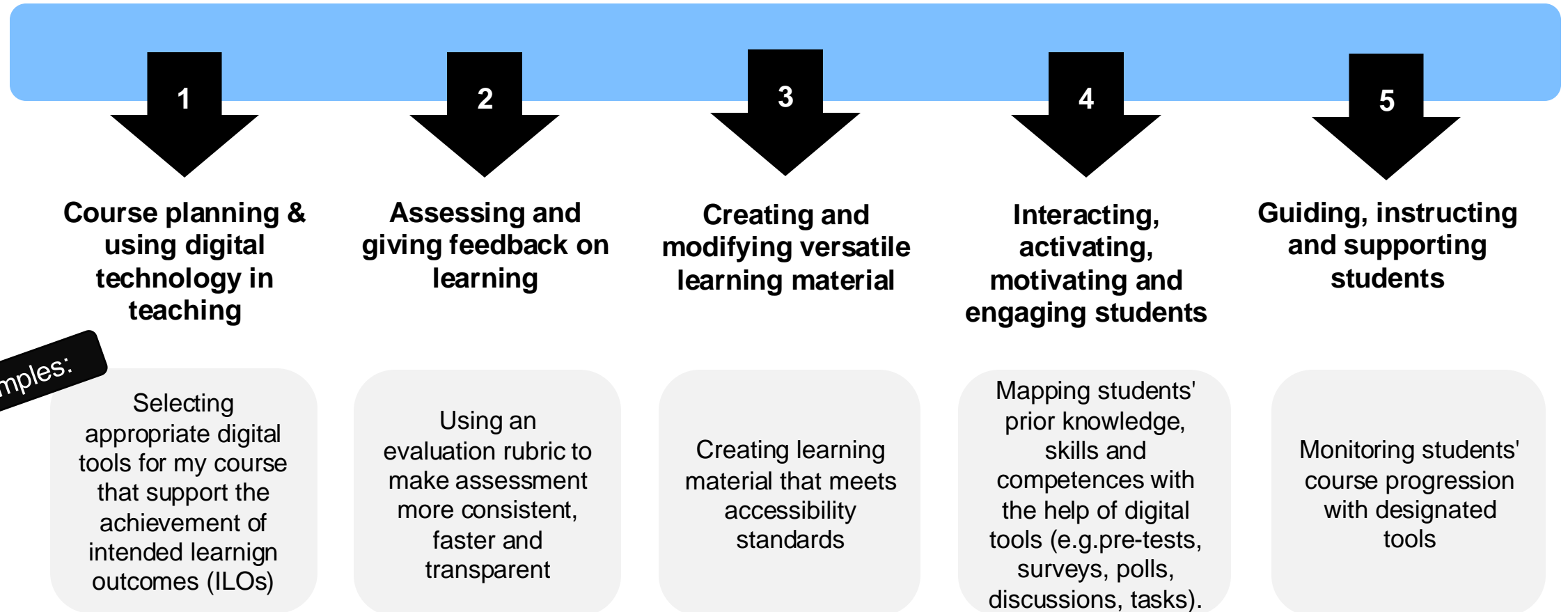|			
1. Definition of **localized** digital pedagogical competence	2. Mapping **current** level of skills with a self-assessment survey	3. Hosting workshops for teachers to define **together** priorities for training	4. Providing **tailored** training and support (ongoing)

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Results

- Response rate: 40% of teaching staff engaged in project activities

- Impact: Raised awareness on quality digital pedagogy

- Status of competence: Identified current strengths and development areas

- Training measures: Identified teachers' preferred learning methods

- Structural issues: Identified practices hindering technology use

- Current project phase: Offering targeted training and addressing structural issues

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Teachers' pedagogical competency areas

in blended, online and hybrid learning environments

Own motivation & attitude

Knowledge of available tools, support and regulations

Pedagogical skills

General IT skills

1 Course planning & using digital technology in teaching

2 Assessing and giving feedback on learning

3 Creating and modifying versatile learning material

4 Interacting, activating, motivating and engaging students

5 Guiding, instructing and supporting students

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Example competencies

1	2	3	4	5
Course planning & using digital technology in teaching	**Assessing and giving feedback on learning**	**Creating and modifying versatile learning material**	**Interacting, activating, motivating and engaging students**	**Guiding, instructing and supporting students**

Examples:

Selecting appropriate digital tools for my course that support the achievement of intended learnign outcomes (ILOs)	Using an evaluation rubric to make assessment more consistent, faster and transparent	Creating learning material that meets accessibility standards	Mapping students' prior knowledge, skills and competences with the help of digital tools (e.g.pre-tests, surveys, polls, discussions, tasks).	Monitoring students' course progression with designated tools

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How we utilized the digital pedagogical competency areas?

- **We conducted a voluntary self-assessment survey to learn about:**

  1. **What is teachers' perceived level of competence** = subjective data on how one perceives their competence level in different areas of digital pedagogy such as course planning, creation of learning material, assessment and interaction.

  2. **How motivated they are to experiment technology in courses and to learn new things**

  3. **What competencies they would like to develop**

Example survey question

How would you rate your own competence in
Creating learning material that meets accessibility standards?

Scale (multiple choice question)
- I can do it well and independently
- I can do it with support
- I can't do it
- Not relevant for me
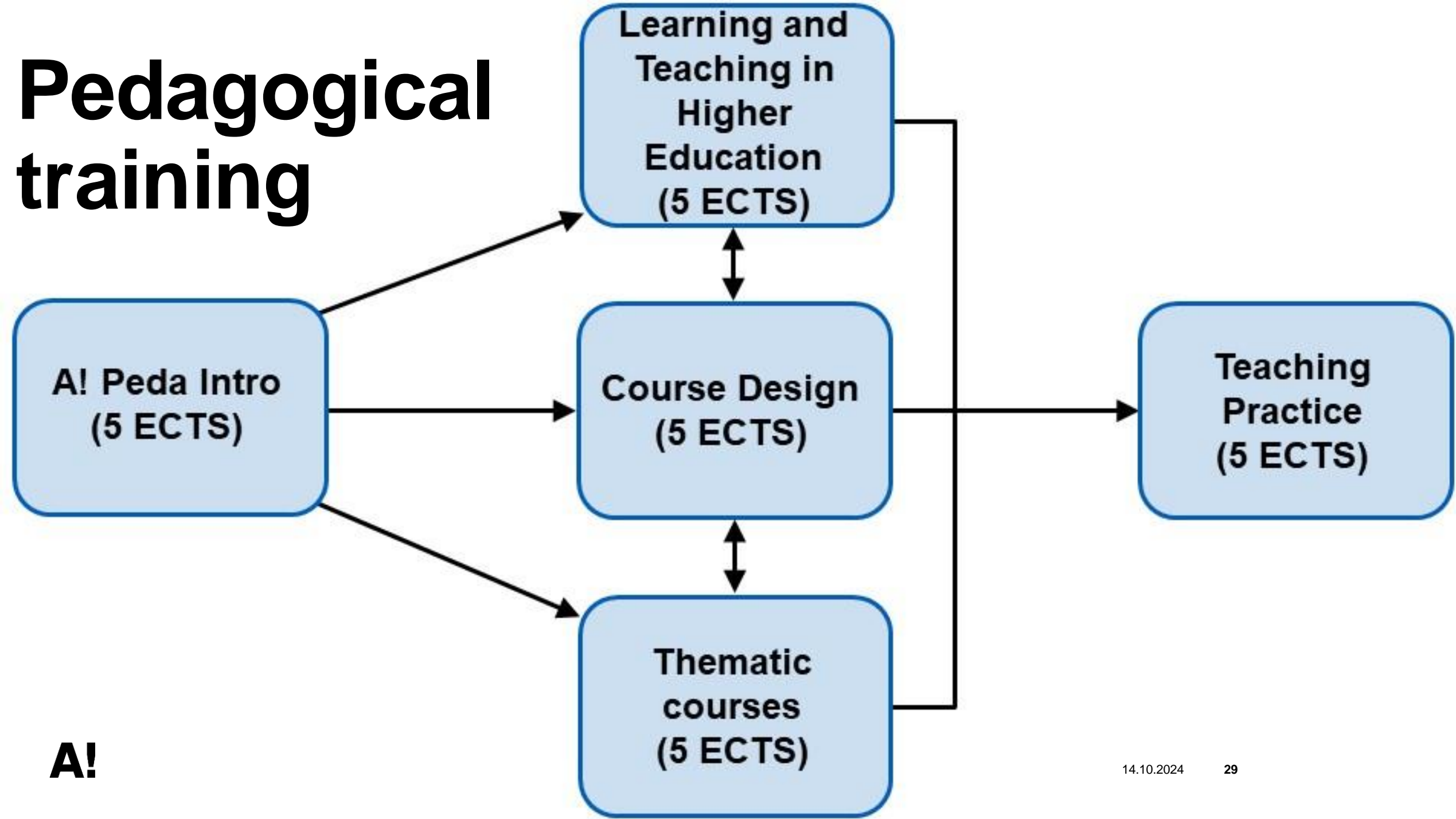- I want to learn more about this

Download
"Teachers' digital pedagogy competence areas in blended learning"
at www.aalto.fi

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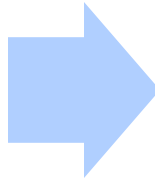# Digital mapping for the pedagogical courses

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Pedagogical training

A! Peda Intro (5 ECTS) → Learning and Teaching in Higher Education (5 ECTS)

A! Peda Intro (5 ECTS) → Course Design (5 ECTS)

A! Peda Intro (5 ECTS) → Thematic courses (5 ECTS)

Learning and Teaching in Higher Education (5 ECTS) ↕ Course Design (5 ECTS)

Course Design (5 ECTS) ↕ Thematic courses (5 ECTS)

Course Design (5 ECTS) → Teaching Practice (5 ECTS)

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First round:

Digital pedagogy as a topic and exploring the use of edtech on course level

Second round:

Pedagogical courses – a showcase of **pedagogical choices**

Third round:

Guidelines for **aligned digital pedagogy in curriculum development**

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I Digital pedagogy as a topic

How edtech could be used to support
a) Course work and interaction
b) Teaching methods
c) Assessment and feedback

II Pedagogical choices

How does edtech support the aligned achievement of the intended learning outcomes of the course?

III Aligned digital pedagogy in curriculum development

Insights at work: from examples to university guidelines

Aalto university's pedagogical courses showcasing digital pedagogy

How does educational technology support the achievement of the learning objectives of the course?
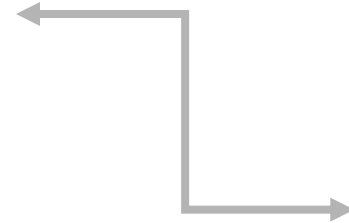
What will the participant learn about educational technology?

Purposeful use of technology in teaching

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Results for teachers of pedagogical courses

Explain

- The concept of digital pedagogy and
- pedagogical competencies

Pedagogical practice

- Dialogue and collaboration
- Agency
- What it means in practical level

Development of teaching

- Alignment
- Curriculum

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Workshop: Benchmarking digital pedagogy and competences practices

Cases per table

1 Teachers' digital competences development

2 Digital mapping of Pedagogical Courses

3 Digital learning services

As a group, each table is going to work with one of the thematic cases.

If you are interested in something else than your table theme, you can switch now.

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In your group (10 min)

1. **The facilitator in your table will brief you into your theme (5 min)**

2. **Split into two groups.**

3. **Introduce yourself to your group members**

   Name and position/organization

4. **Choose who will be the spokesperson for your group**

➢ The spokesperson should prepare to present a short summary of your theme and discussion (3min) to the rest of the group.

During the discussion (15 min)

1. **As a group, read through the poster and ask questions from your facilitator.**

2. **Read the questions in the template. Discuss (either in German or English).**

   You can choose the questions that interest you the most.

   Make sure everyone is heard.

3. **Write your thoughts on the post-its (in English) - 3 min**

   If there are conflicting ideas, write both.

Based on your experiences,

Opportunities	Obstacles
Are there ideas or **concepts** that could **be implemented right away**?	What are the **specific obstacles or challenges** that may hinder the implementation of these new ideas within your organization, if any?
Are there any **inspiring ideas** for the future?	

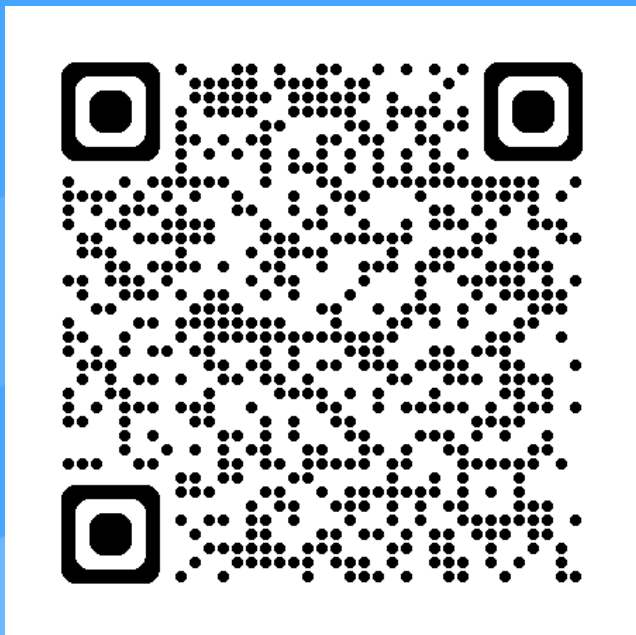# Sharing (3 min for each group)

- **When presenting your discussion, share the main takeouts of the theme and 1 key point of your group discussions.**

Wrap-up

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See our Material bank with additional resources

https://sway.cloud.microsoft/odHe3WCC4aAQqaOf

Want to collaborate?

Don't hesitate to contact us.

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Kiitos
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