

*Teachers in the educational ecosystems –
professional development in changing
conditions*

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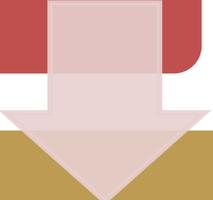
**Driving Changes in Teaching and Learning
through Policy and Innovation
HEA Conference Dec. 12, 2024**

Teaching and Learning in HE?



The contents

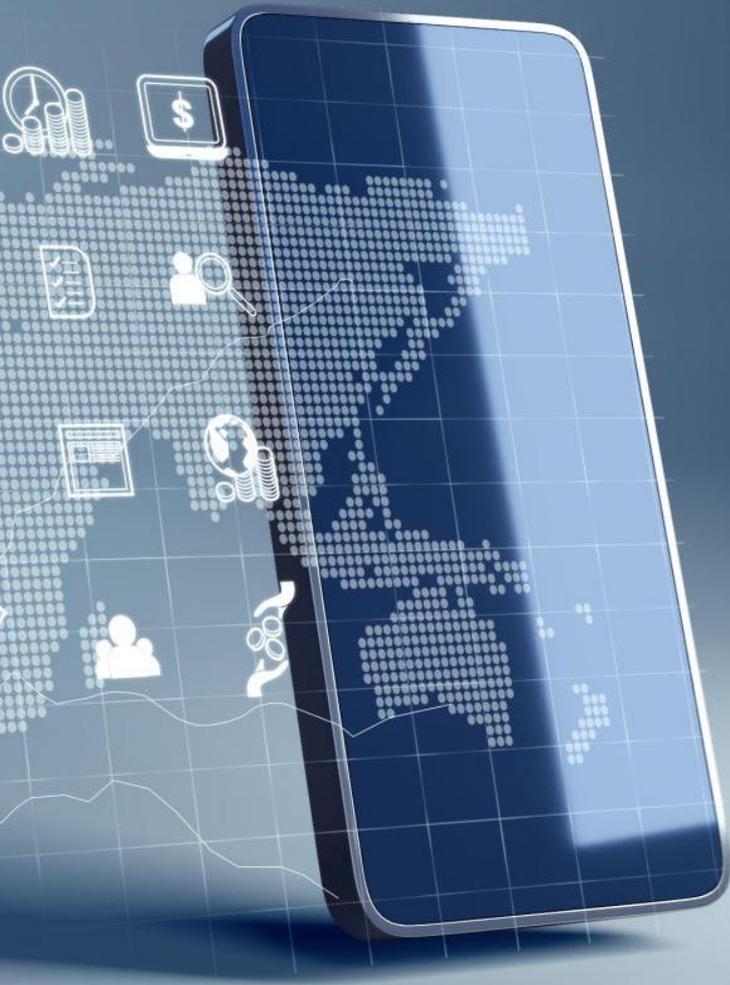
The analysis of changes
from the societal and
technological
perspectives



What is learning in
changing circumstances?

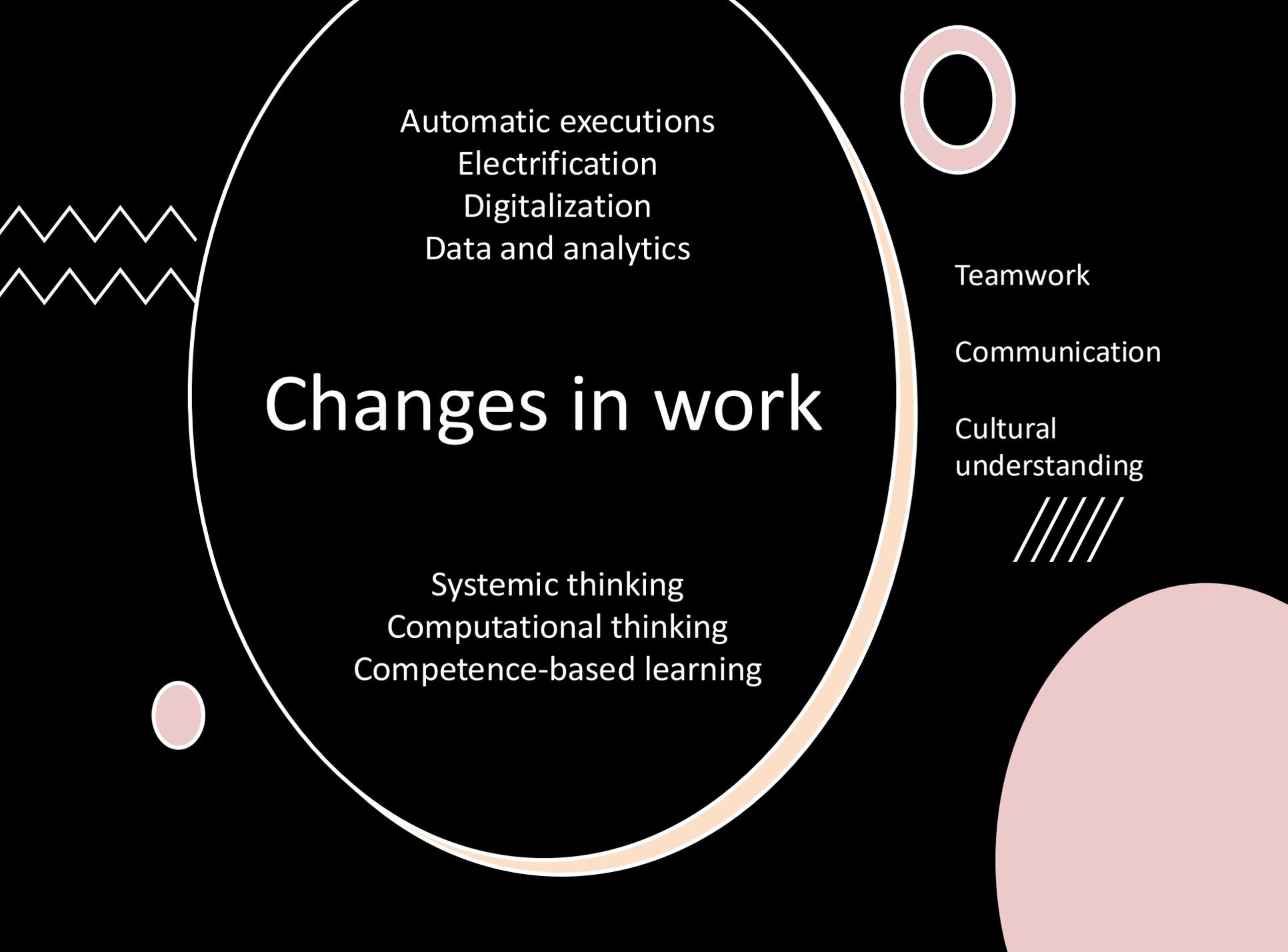


What is HE teachers'
professional development
in changing conditions?



The life around us

- Changes in work
- Changes in technology
- AI everywhere
- Changes in communication and social media
- Changes in the concept of truth and evidence
- Changes in knowledge production



Changes in work

Automatic executions
Electrification
Digitalization
Data and analytics

Systemic thinking
Computational thinking
Competence-based learning

Teamwork

Communication

Cultural
understanding



Social and human crises

Unequalities

Poligitcal crises

Refugees

Learning crises

Corruption

Violence and wars

Unemployment; lack of competences

Migration and Urbanization

Disinfromation and alternative truths

Planet and Eco-systems crises

- Climate change
- Air quality
- Fresh Water
- Deforestation
- Loss of biodiversity
- And much more

AI in everyday life



- *transportation*
- *home/service robotics*
- *healthcare*
- *education*
- *public safety and security*
- *employment and workplace*
- *entertainment*

Current changes in Social Media and Knowledge Production

Shift to Visual and Video Content

Platforms like Instagram, TikTok, and YouTube have popularized short-form video content

Rise of Ephemeral/Momentary Content

Instagram Stories and Snapchat Snaps, have become mainstream. This short-lived format encourages spontaneous sharing and urgency to view.

Political and ideological purposes with misinformation and hate



SUSTAINABLE DEVELOPMENT GOALS



Challenges Today:

- **Disconnection between what is taught and real-world needs.**

Future learning - a long history

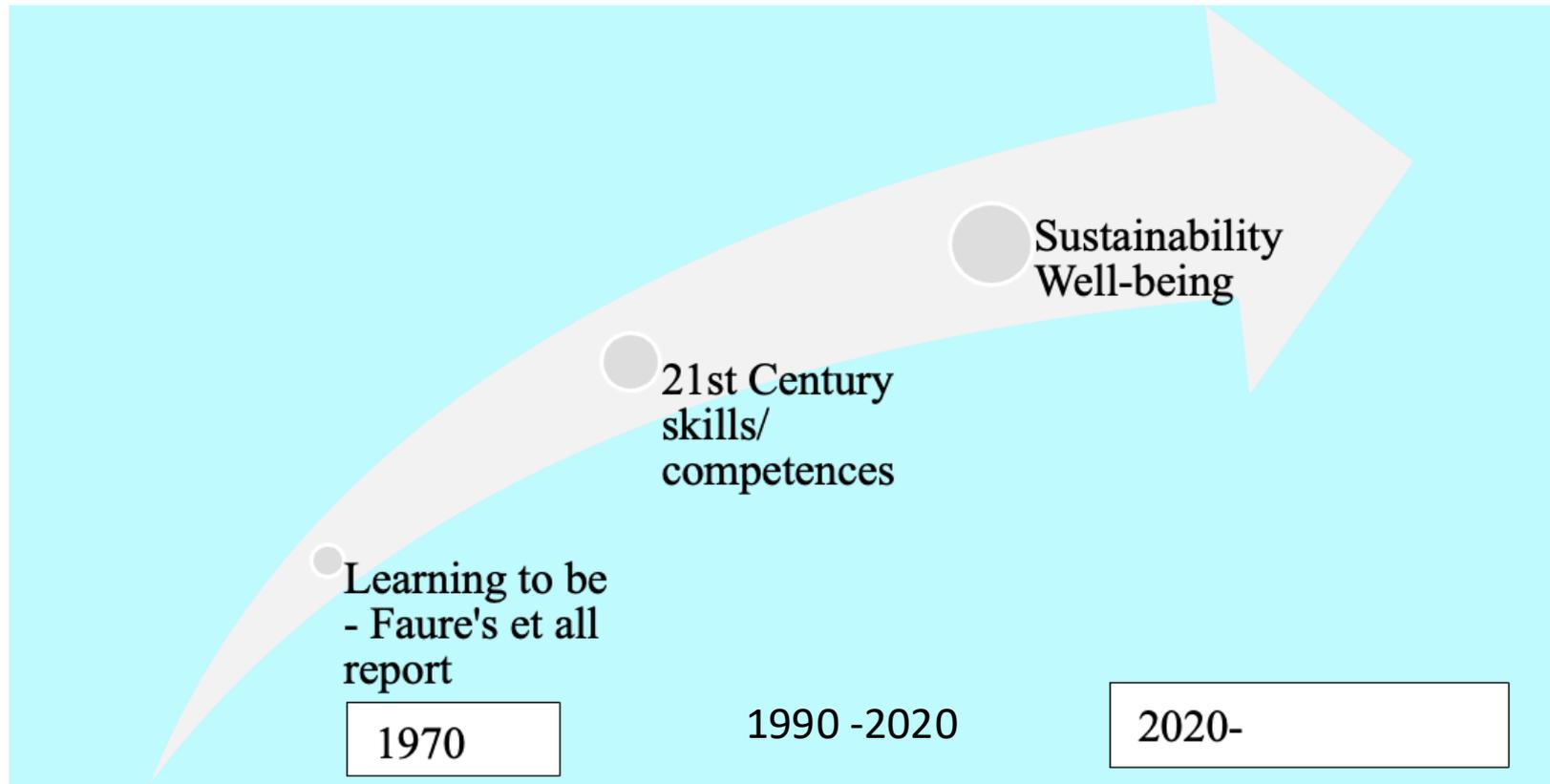


Figure 6. Changes in the global competences

**WHAT IS LEARNING
IN CHANGING
CIRCUMSTANCES?**



The role of higher education (HE) to prepare students to become experts for the future.

Urgent needs to find solutions to environmental and climate changes and other UN's strategic goals, have increased demands to HE.

to plan, conduct, and engage in sustainability research and problem-solving irrespective of the discipline.

Competency



Knowledge



Skills



Values



Attitudes

Global demand

- To create the knowledge
- To apply the knowledge
- To solve problems
- To anticipate changes
- To make change

- Skills that are needed in work, life, and society
- Creativity
- Skills for knowledge creation

- Problem-solving needs values and attitudes of “The common good”
- Equity
 - Human rights
 - Sustainability

Competency



Global challenges

People cannot apply the knowledge they learned in schools and universities

Skills gap –
Not having skills that are needed in work and society

Opportunities to learn problem-solving skills with values are not available in schools and universities

- What do these all mean to teaching and learning in HE?

Preparing for both predictable and unpredictable changes and transformations?

Work

Teachnogy - AI

Social Media

Knowledge production

Barriers to student active learning in higher education

- Better alignment between research and teaching practices,
- Supporting infrastructure for research and teaching.
- Staff professional development and learning designs.

Competencies in Sustainability for Graduating Students

- Systems Thinking Competence
- Futures Thinking (Anticipatory) Competence
- Values Thinking (Normative) Competence
- Strategic Thinking Competence
- Interpersonal (Collaboration) Competence
- Integrated Problem-Solving Competence

How to students' learning

Learning is an active process of a unique person.

Learning is a social process

Interactions with others and artefacts.

Human beings have agency in learning

Motivation and engagement

Meaningful entities

Niemi, H. 2021. AI in learning: Preparing grounds for future learning *Journal of Pacific Rim Psychology*. 15.

New approaches in students' learning in HE

Systemic thinking: interdependencies of processes

Participatory: involvement in authentic projects

Designed based projects –together with stakeholders, practitioners and policy-makers

Cross- and Multi-disciplinary

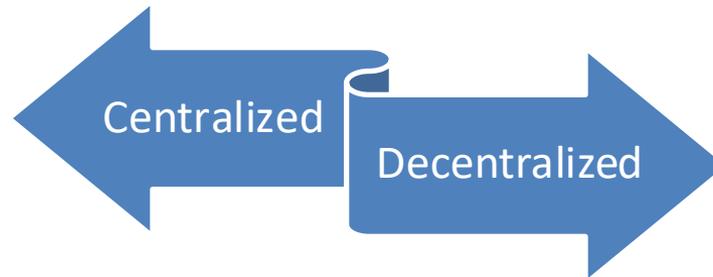
Multi-partner: researchers, companies, practitioners

Universities profiles for DSG



**WHAT IS TEACHERS'
PROFESSIONAL
DEVELOPMENT IN
CHANGING
CIRCUMSTANCES?**

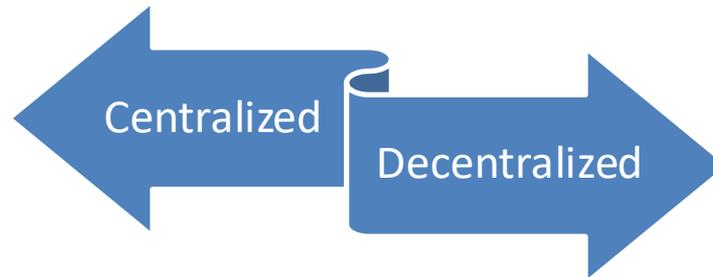
Teachers professional role



- A detailed national curriculum
- Pre-selected learning outcomes and materials
- National assessments and tests
- National in-service training

- School-based curriculum designed by teachers, principals and local partners
- Professional freedom and responsibility to select learning materials, teaching and assessment methods
- Many options for in-service training – responsibility to update own professional development

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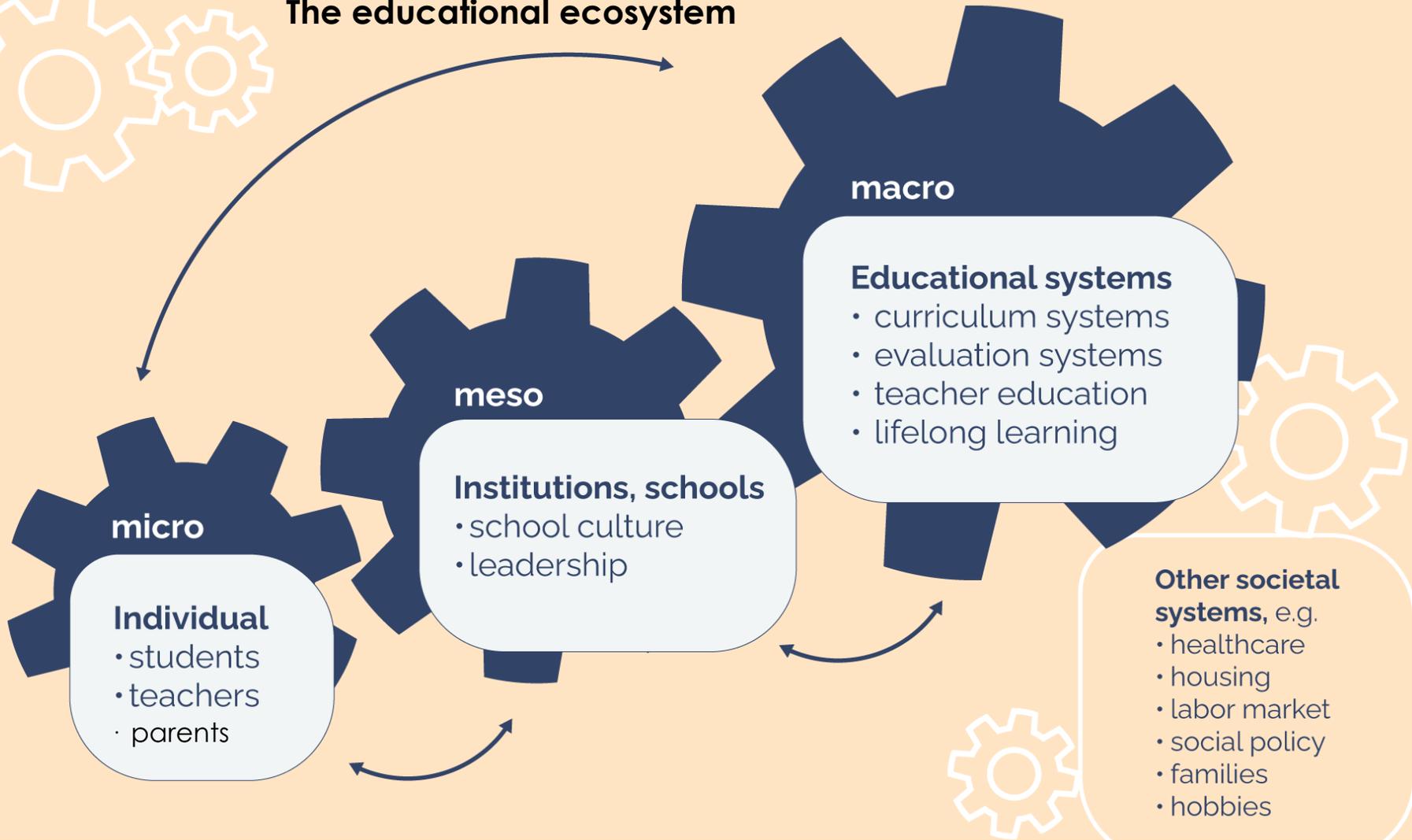


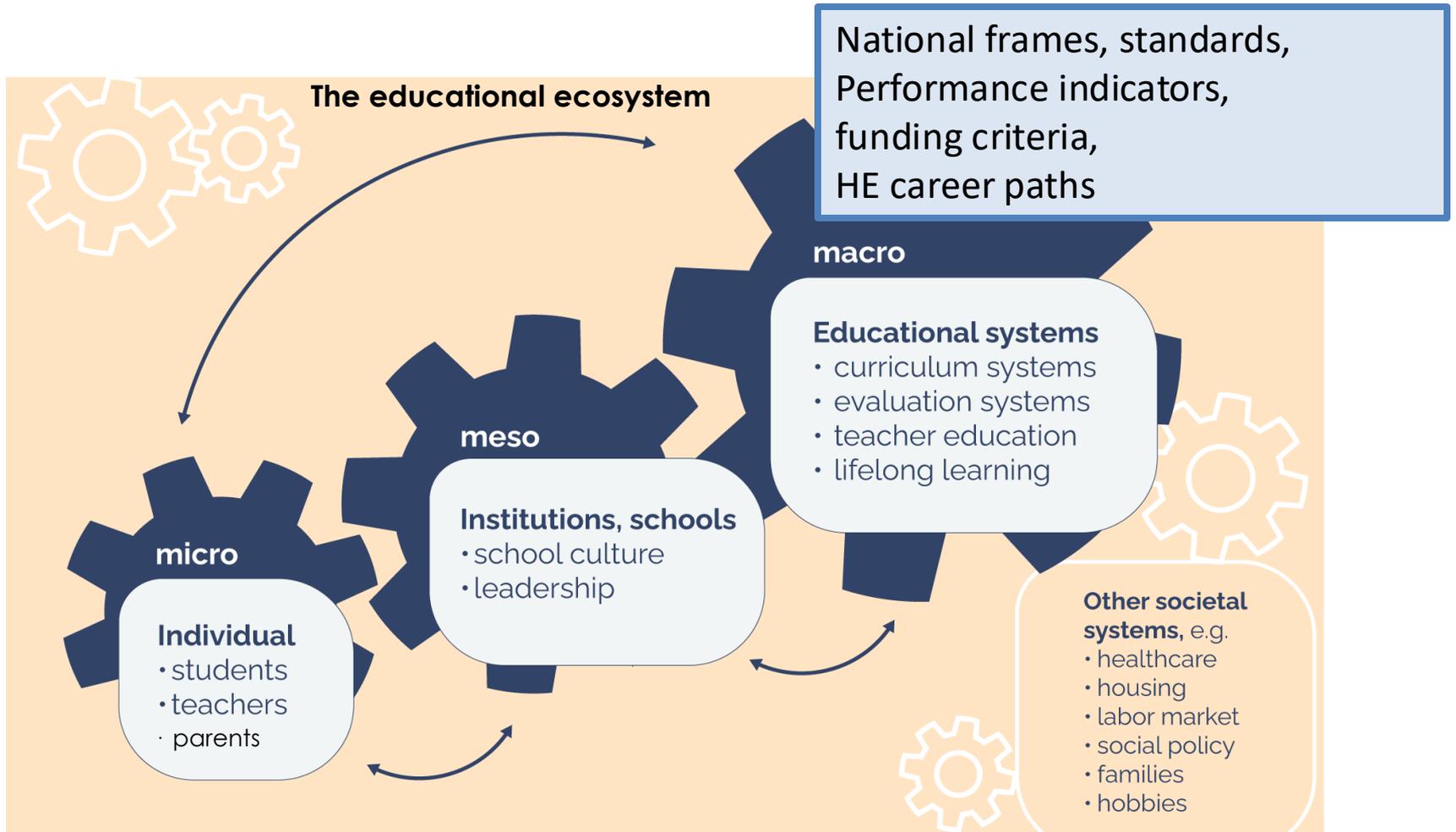
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In higher education, teachers have more autonomy than in other education
However, they are part of the educational ecosystem

The educational ecosystem







The educational ecosystem

National frames, standards,
Performance indicators,
funding criteria,
HE career paths

macro

Educational systems
• curriculum systems
• evaluation systems
• teacher education
• lifelong learning

meso

Institutions, schools
• school culture
• leadership

micro

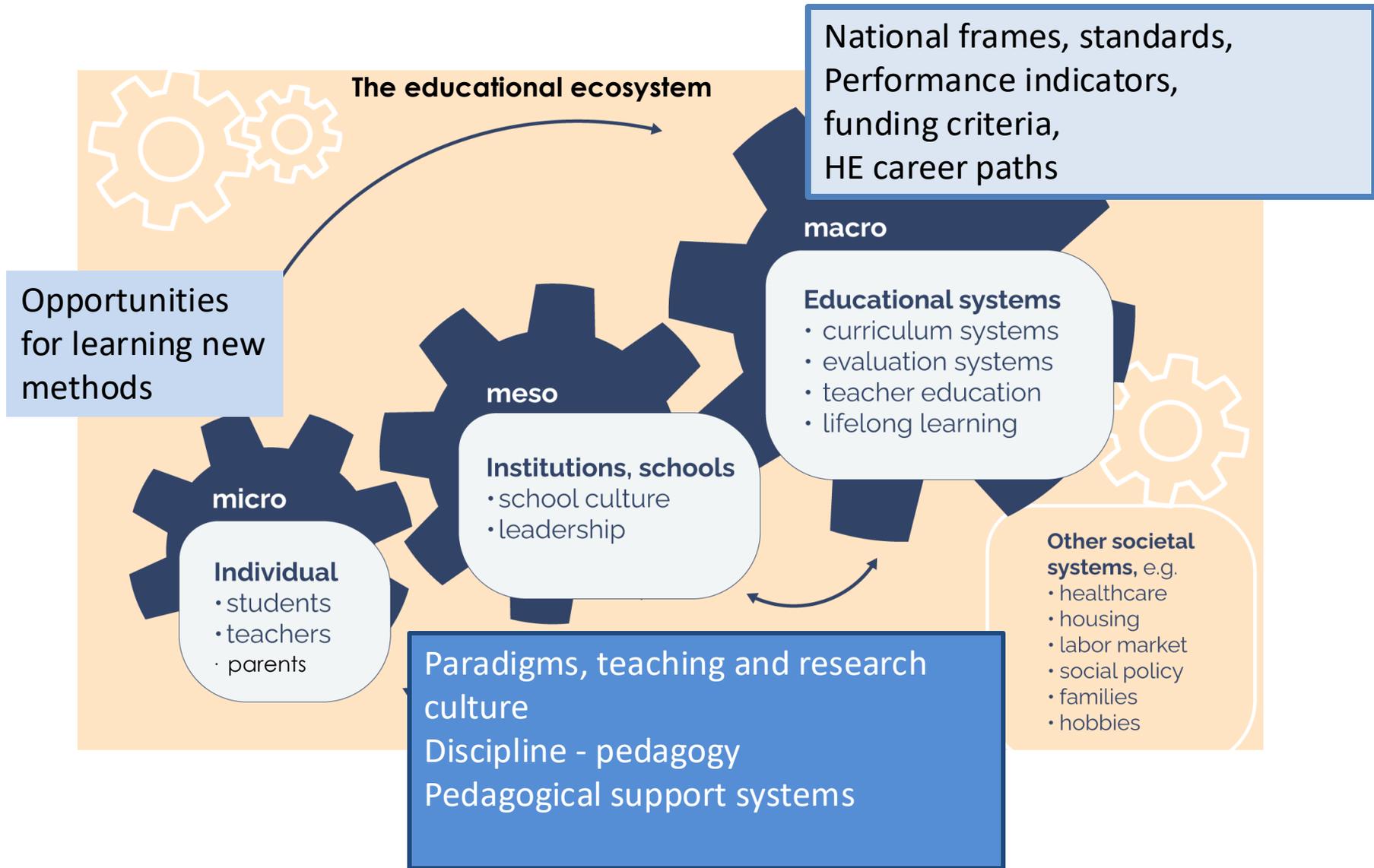
Individual
• students
• teachers
• parents

Other societal systems, e.g.
• healthcare
• housing
• labor market
social policy
families
hobbies

Paradigms, teaching and research culture
Pedagogical support systems



The educational ecosystem



**The support to
professional
development for
continuous learning**

Professional development is a holistic process in which the teacher's whole personality is involved.

it is re-structuring earlier concepts on students, colleagues and aims of teaching and education. It is a learning process.

Teachers need mentoring, collegial, and leaders' support.

Professional learning happens in practical situations, e.g., projects where the community works together.

Teachers are part in the community of practices.

Communities of Practices (CoP) in HE

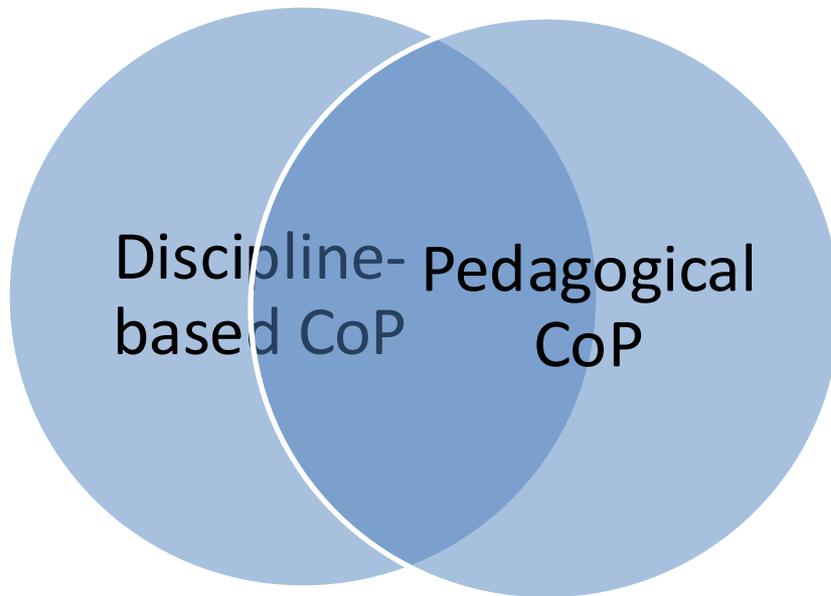
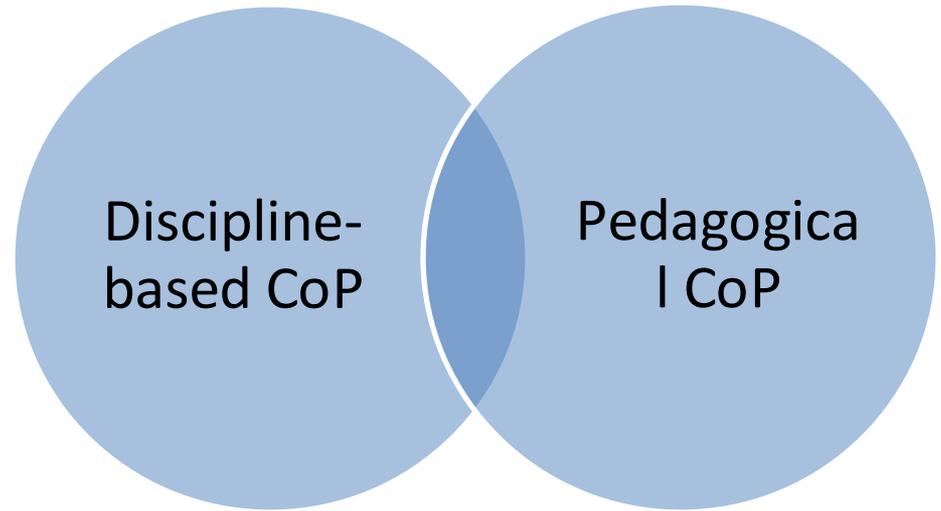
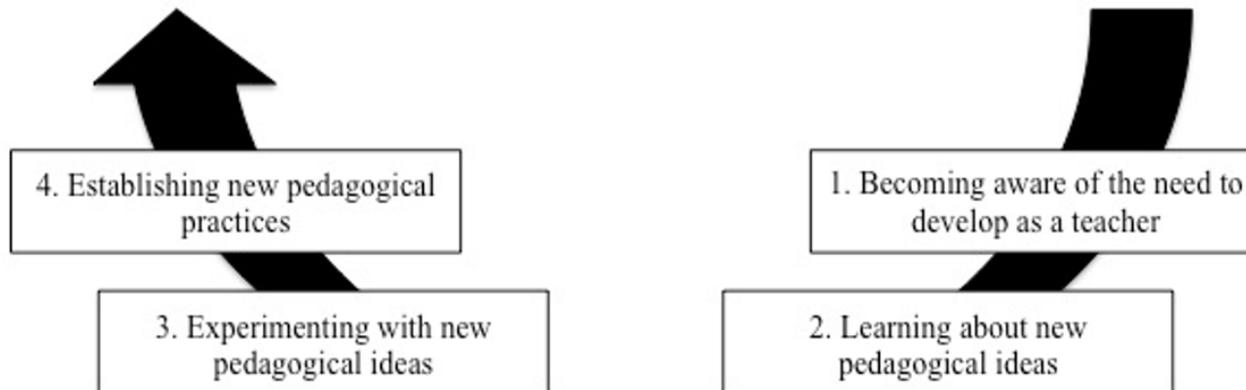


Figure 1. Framework of pedagogical development in academic communities of practice (based on Wenger 2000, Mezirow 2009)

<p>Shared practices: Learning as doing</p>	<p>Shared meanings: Learning as experiencing</p>	<p>Shared ways of belonging to a community: Learning as belonging</p>	<p>Shared identities: Learning as becoming</p>
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Doing pedagogical discipline-specific research,
encouraging disciplinary colleagues to join PCoP



RESEARCH, PEDAGOGICAL EDUCATION AND DEVELOPMENT



Research

Publications and projects of the Centre for University Teaching and Learning (HYPE).

HYPE

CENTRE FOR UNIVERSITY
TEACHING AND LEARNING

Pedagogical education and development

The Centre for University Teaching and Learning offers courses in University Pedagogy for UH staff.



People

The Centre for University Teaching and Learning (HYPE) is a research and development centre for university pedagogy serving the entire Unive

The Centre for University Teaching and Learning (HYPE) at the University of Helsinki conducts research on active learning, psychosocial wellbeing, learning-centred teaching and changes in education in higher education as well as other educational contexts.

the Centre is located at the Faculty of Educational Sciences and operates in five field-specific teams (HumPeda, Life Science Peda, MediPeda, Science Peda and Social Sciences Peda) formed by the University's faculties.



Learners in HE today create the future; they are decision-makers tomorrow.

The aim is that students learn to use their agency to build their own lives and the common good.

Driving Changes in Teaching and Learning through Policy and Innovation

The change needs a joint vision and continuous cooperation with diverse partners.

Thank you!



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 - Working for teacher education, quality learning for all students, technology as a tool for learning
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