

# RESEARCH TEACHING NEXUS: HOW DO WE DO IT? / HOW IS IT REALIZED IN OUR TEACHING / HOW DO YOU DO IT AS A TEACHER AND A RESEARCHER?

- **THE PERCEPTIONS OF ACADEMICS ON HOW  
THEIR RESEARCH IS ENHANCED BY THEIR  
TEACHING**

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# PERSPECTIVES ON RESEARCH-BASED TEACHING AND LEARNING AT UNIVERSITY

University of Helsinki Teachers' Academy and the Centre for University Teaching and Learning (HYPE) will organise a series of events on the connection between research and teaching, entitled 'Perspectives on research-based teaching and learning at university

**17.11.2022 Physicum, lecture hall D101 (information and registration)**

Research-based teaching and learning at university: what does it mean – what could it be?

**Keynote: Kirsti Lonka:** How does research-based teaching and learning benefit students?

**Today:** Research-based teaching and learning at university: How do we do it? / How is it realised in our teaching / How do you do it as a teacher and a researcher?

In May: How do we lead it?

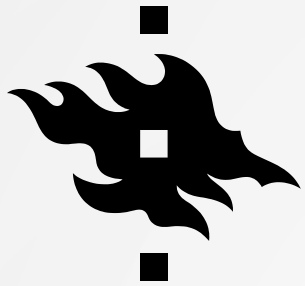


# WORKSHOP

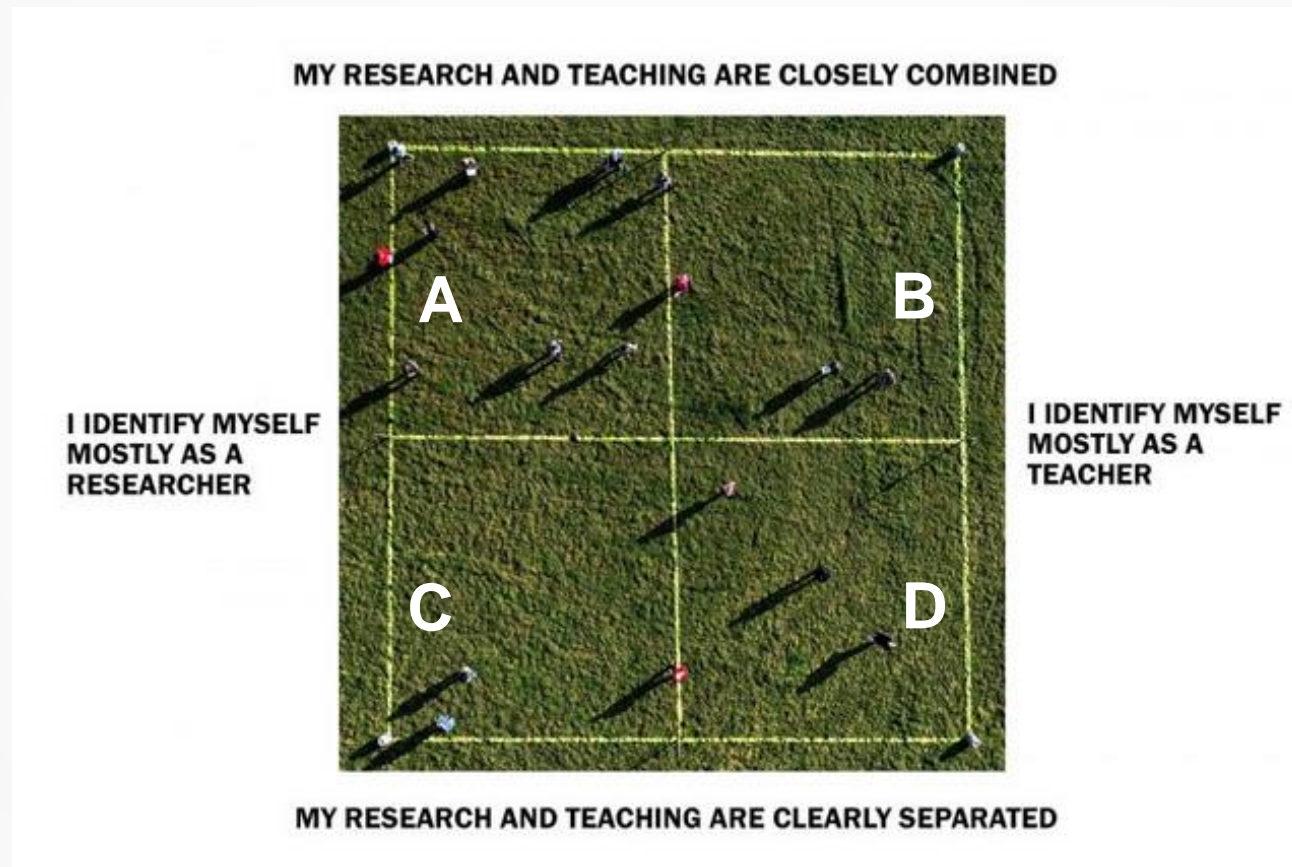
Aim is to share ideas of research-based teaching from the point of view of the teacher. We will focus on how teaching can support research.

- 14.30-15.00 Positioning and sharing ideas on how teaching could support research  
Positioning oneself to different levels of research-based teaching.
- 15.00-15.20 Introduction to our research on the topic
- 15.20-15.30 Discussion in groups
- 15.30-16 Discussing together





# POSITION YOURSELF







## DISCUSSION IN GROUPS

- Introduce yourself
- Why did you choose the place?
- Think about ways how teaching can support research?
- How could this be realised in your own work?
- Write your ideas to post-it notes (one idea per note)





# INTRODUCTION AND THEORETICAL BACKGROUND

Teaching and research are viewed often as competitive elements in HE

In many countries, there is a strong link between research and teaching in HE, and the two aspects of scholarship have been intentionally integrated (Brew, 2003)

Research-teaching nexus layered and complex (Jenkins, 2004) and is often seen as research-led teaching, where research findings are disseminated in teaching

Only few studies have explored the impact of teaching on research, while most of the studies deal with the impact of research on teaching (Elken & Wollscheid, 2016)

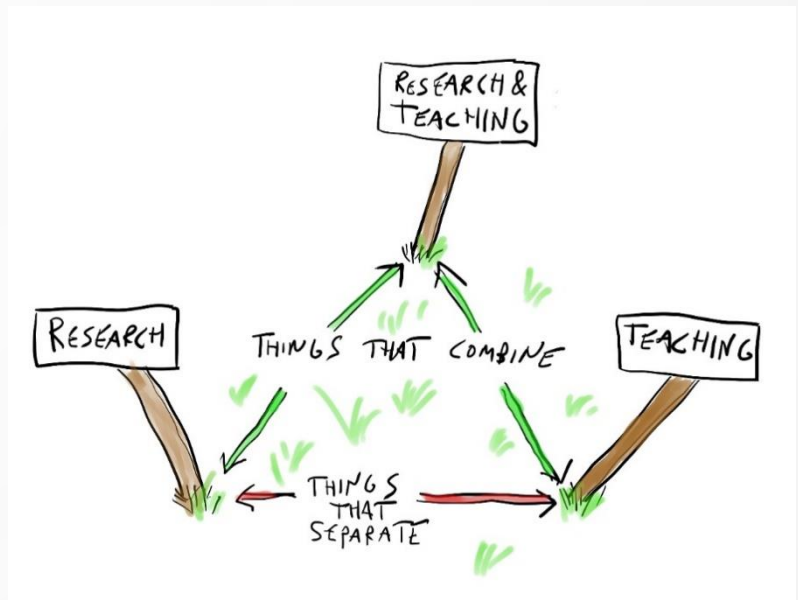
We used a broad definition of research includes the entire spectrum of scientific knowledge production (Brew, 2006) and learning in social context, involving all participants, irrespective of the role as students or academics (Brew, 2003)



# RESEARCH QUESTIONS

What kind of positive influences does teaching have on research?

- How do different aspects of teaching affect the quality or content of research?
- How do different activities of teaching and student interaction affect the academic professional?





# METHODS

**Participants** from the research intensive University of Helsinki, Finland included 17 highly experienced academics

Permanent staff members active in both teaching and research in the fields of Life Sciences and Applied Life Sciences

**Semi-structured interviews** in person and via Zoom

Designed to investigate the academics' perceptions and practices on the connection between their research and teaching

Example questions:

Has your teaching had a positive effect on your research?

What kind of role does your students have in your teaching?

Do your students take part in your research work? If so, why?

**Analysis** – inductive content analysis combining inductive and deductive analysis strategies (Mayring, 2000)





# RESULTS - HOW DOES TEACHING SUPPORT RESEARCH?

The academics described a vast variety of aspects of how teaching supports research

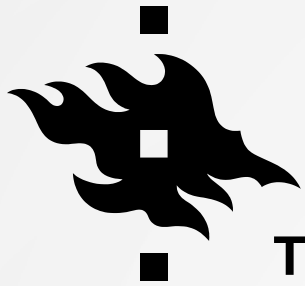
The direction of influence from teaching to research was clearly **a new insight** for many academics

Students had a variety of roles in the practices described

Majority of the examples were everyday knowledge-creating practices in **research process**, such as:

- Getting ideas for planning the research topics
- Using, testing and developing research methods
- Writing and editing papers with students





# RESULTS - HOW DOES TEACHING SUPPORT RESEARCH?

## THEMES

### 1. Enhancing well-being at work

Increasing energy, motivation and coping

### 2. Nourishing expertise and competence

Increasing mastery of knowledge, theory and research

Developing communication and interaction skills

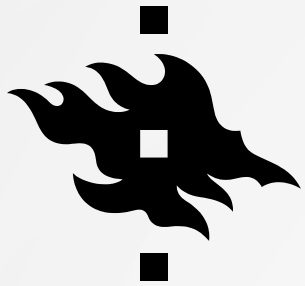
### 3. Enhancing research process

Planning, carrying out and reporting about research

### 4. Building scientific community

Students as a work force and research partners

Supporting interdisciplinary communication and communality



# 1. ENHANCING WELL-BEING AT WORK

**Teaching is seen as motivating factor for research, as it is rewarding and increases interaction**

*“Research can be quite a lonely process. So having an interactive activity with young people who has the energy and motivation to change the world, and are curious. It’s just rewarding in its own way. (18)”*

**Teaching brings energy for research work**

*“So, [teaching] gives me a good feeling, like hey, my work is fun, I like to do this. And surely it reflects to research as well, even though there is not that straight a link. (34)”*



## 2. NOURISHING EXPERTISE AND COMPETENCE

**Teaching increases researcher's expertise and know-how on knowledge, theory and research methods**

*"For me it came as a surprise that my knowledge wasn't up to date in one subarea. This showed up because I wanted to teach comprehensive knowledge of the subject. (25)"*

**Teaching develops researcher's communication and interaction skills**

*"Many researchers enjoy working by themselves, and when you put them to teach small student groups, they have to learn how to share their expertise. (27)"*



### 3. ENHANCING RESEARCH PROCESS

Teaching has a positive interaction with the research process - in phases of planning, carrying out and reporting

*"This would not be possible, if I did not link students to the research – If we would not systematically and carefully collect data [with students] that can be used in research..." (32)*

*"If I have a germinating idea on what kind of thematics I will use in my research paper, I will use this idea and make a lecture about it. - The lecture and the discussion with students clarify the idea (31)"*







## 4. BUILDING SCIENTIFIC COMMUNITY

### Students as workforce and as research partners

*“We win in the sense that we get cheap workforce, and the students win in the sense that they learn new things and can also get credits for the work. (29)”*

*“The relationships, which transfer to the research group, are built during teaching. The students, who I want to collaborate with after they graduate, will stand out. (27)”*

### Teaching builds interdisciplinary thinking, collaboration and community

*“ I have had many students from other disciplines - - and after all, we have a lot in common. And then through those students also I learn something new. (35)”*

*"I think of it in the way that we do the same things as students here, but I've just been doing them for longer " (30)*



# CONCLUSIONS

Teaching has a positive impact on research in various ways

Beneficial for academics to think about this

It may affect curricular and pedagogical choices, self-reflection of work, and how the process of knowledge production is perceived

It may, and should, change curricular design, rewarding systems of universities, academic staff recruitment policies, work wellbeing, student engagement and learning (see also Harland 2016)





# DISCUSSION

1. Enhancing well-being at work
2. Nourishing expertise and competence
3. Enhancing research process
4. Building scientific community

**Position your post-it notes to the poster**

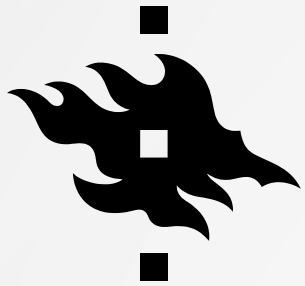
**You can also add new notes**

- How did you experience the categories?
- Was there something missing? **Did you come up with new perspectives?**
- Is there some hindering or supporting factors for research-based (teaching enhances research) teaching?
- **What does this mean to the development of teaching or our university?**



**THANK YOU!**





# REFERENCES

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*Illustrations and pictures:* Research group, HY material bank, *Drone footage:* Miikka