

The logo for 'ifous' is displayed in a large, black, lowercase sans-serif font. A small green dot is positioned above the letter 'i'.

... innovation, research and development in schools and pre-schools

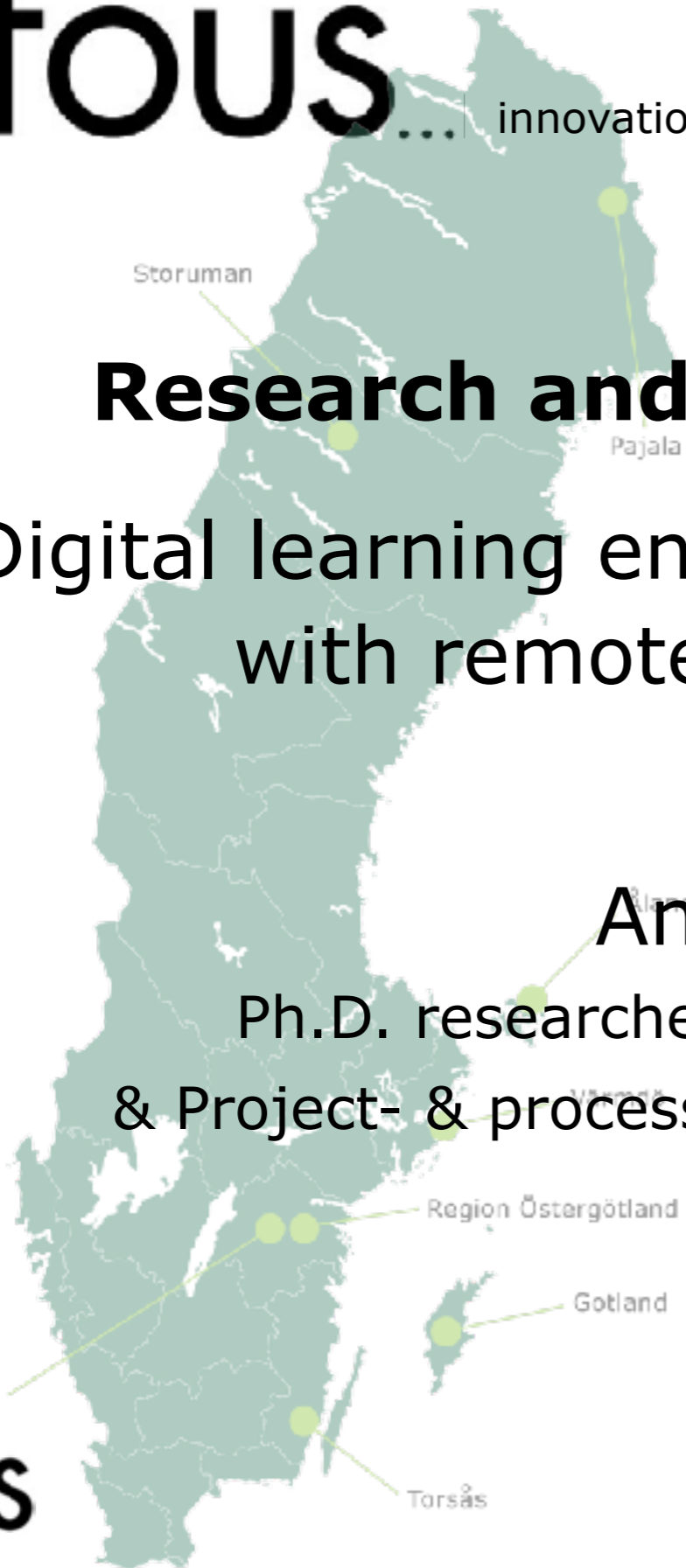
Research and development program:

Digital learning environments - equal education
with remote and distance learning

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& Project- & process manager at Ifous, www.ifous.se

A smaller version of the 'ifous' logo is located in the bottom left corner of the slide.

Research interests:

Teaching, learning and assessment with the use of digital technologies

Research project: Programming didactics -
learning and assessing programming in primary education

MARCUS AND AMALIA
WALLENBERG FOUNDATION

Swedish EdTest - Sweden's first national EdTech testbed
<https://edtest.se/>

SWEDISH
EDTEST.

Research project: Remote and distance education

ifous

Research and development program:

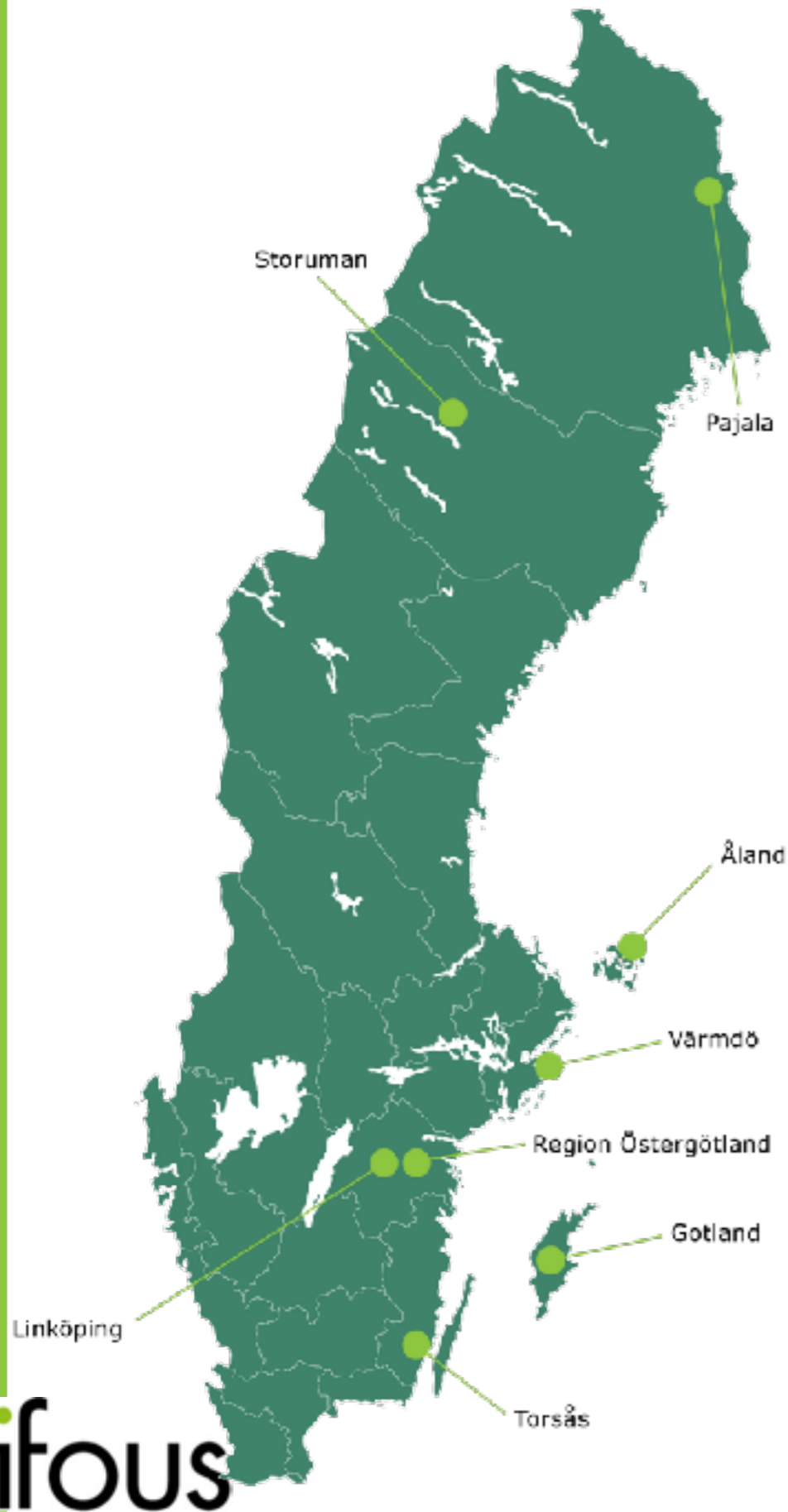
Digital learning environments - equal education with remote and distance learning

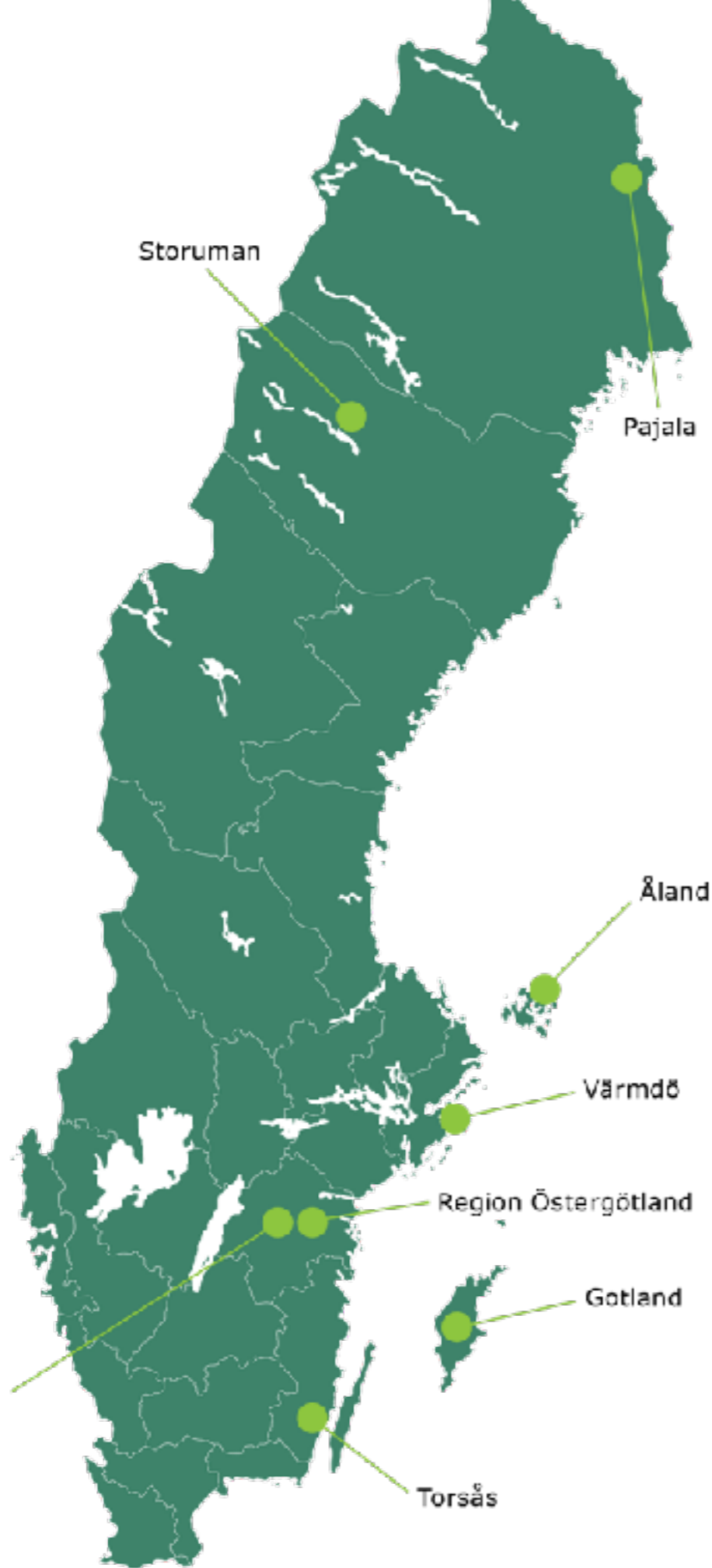
About the program

| Experiences so far...

Participants:

- 8 school organisers (skolhuvudmän)
- Aprox. 60 participants
 - Each school organiser has a group of teachers that works to develop their practice
 - The group is lead by a local process manager
 - Decisions are made in a steering committee
- Researchers:
 - Charlotta Hilli, Åbo Akademi
 - Anna Åkerfeldt, Ph.D.





Compulsory school

Upper secondary school

Adult education

Subjects

Modern language

Heritage language (Mother tongue tuition)

Mathematics, English, Music, Science studies, Social study subjects, Swedish, Swedish as a second language

Longterm goal is to...

... with the support and use of digital technology create a more efficient use of teachers resources regardless of geographical location and thus increased conditions for equal access to education.

The aim with the program:

- further, develop didactic methods in remote and distance education and develop the teacher's role when teaching online
- strengthen the ability of school principals to offer good quality remote and distance education and, in the long run, contribute to a more equal education.
- in collaboration between the school's professions and researchers, increase the knowledge of teaching in digital environments.

Design based research - working closely with the participants

Survey - 2019

- 47 teachers / ICT teachers
- 4 principles and school leaders

Focus groups, observations, meetings

- 12 focus groups interviews
- Approx. 10 observations
- Meetings (webinars, local process management meetings)

Challenges - teachers

- Design of material in digital learning environments
- Social relations online (How to establish and maintain relations with the students and how to organise for collaborating work)
- Assessment
- Design of tasks (group as well as individual tasks)

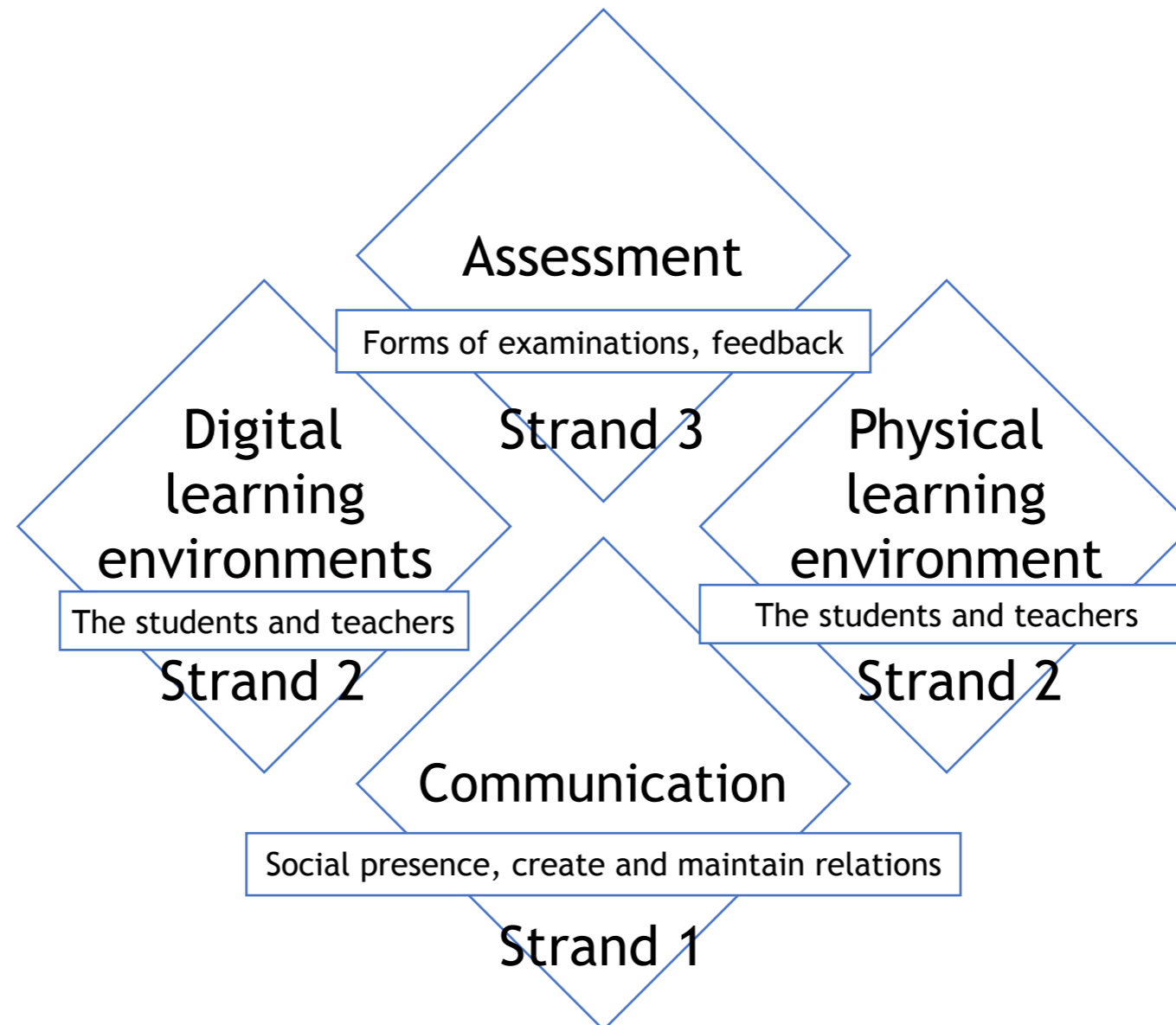
Challenges - School leaders

- Legislation
 - (legally and workable solution with assessment)
- Professional development and to share knowledge
- Technologies (hardware and software)
- Attitudes towards the use of technologies and to teach remote and distance education
- Develop teachers digital competencies
- Lack of educated teachers
- Forms of recruitment (hard to offer full-time employments)

Prominent themes:

- professional development (digital competencies, sharing knowledge and experience)
- communication and social relations,
- assessment,
- legislation,
- design of material in digital learning environments

Strands



Strand 1

Communication

Social presence, create and maintain relations

Strand 1

Teacher



Student(s)

Student(s)



Student(s)

Synchronous and Asynchronous Communication Social presence

Guided by for example:

- G. Salmons e-tivities and five stage model of online teaching
- D. Laurillard - ABC design
- research articles



Communication in remote and distance education work in progress...

Remote education: Create student - student activities

Adult education: Establish and maintain communication in order to reduce students drop outs.

Methods:

- Involve the students by targeting their interest
- “Less is more”
- Meta reflections (Exit-tickets, discussions about the course)
- Create opportunities to see each other (upper secondary school)

Methods:

- Use synchrony communication (e-mail, chat)
- Check-in tasks every week
- Important that the teacher maintains the communication
- Always have an “open channel”

Prel. results

Communication in remote and distance education

Tendencies towards....

- Teachers: An active and systematic approach to designing online communication - new methods, routines are being developed
- Increased students communication (remote/fjärr)
- Increased number of students that receives grades (upper secondary school) and follow through courses (adult education)

Survey - upper secondary students

work in progress...

Online learning climate scale (OLCS)

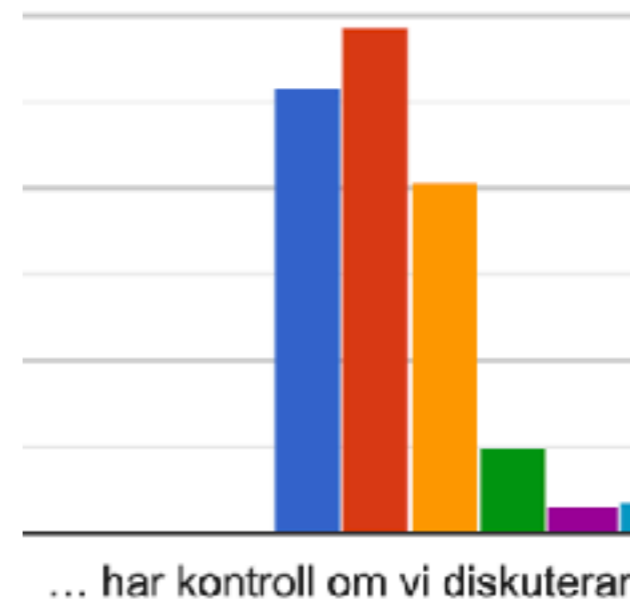
Renee Kaufmann, Deanna D. Sellnow & Brandi N. Frisby (2016) The development and validation of the online learning climate scale (OLCS), *Communication Education*, 65:3, 307-321, DOI: 10.1080/03634523.2015.1101778

As of today: 1 668 students answer

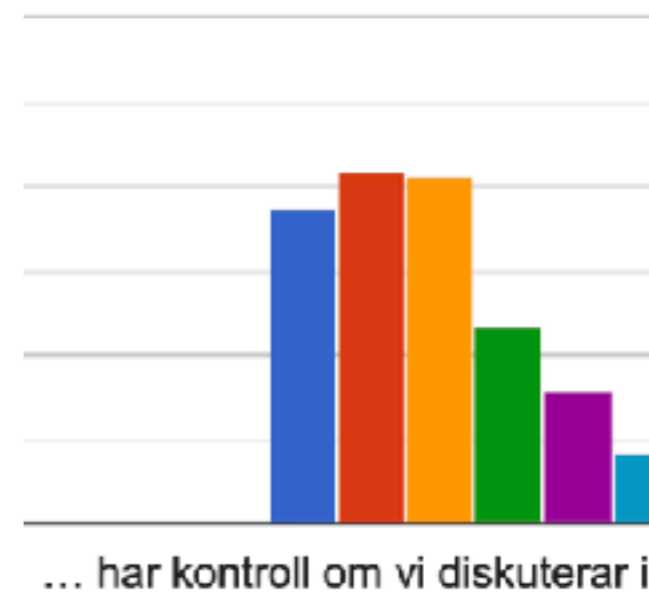
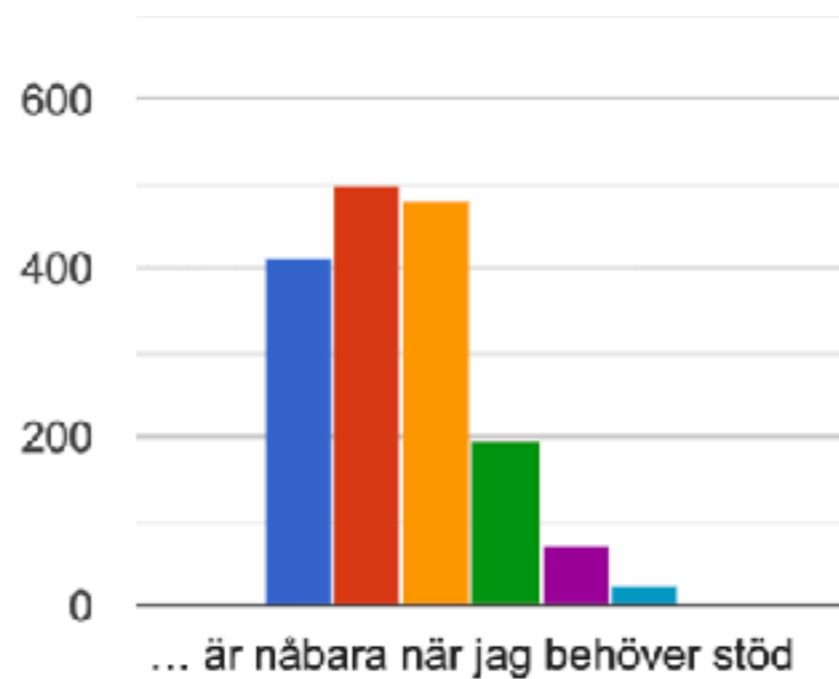
The teachers....

Strongly agree | Håller med i hög grad | Håller delvis med | Håller i låg grad med | Strongly disagree

In school



when learning online



... a selection of frequent comments from the students:

**What is the most challenging when study online?
1524 answer**

- To get help and support from the teacher
- To get something done
- Nothing
- Loneliness (missing classmates)
- Group work
- Get up in the morning
- Motivation
- Boring
- Group work, discussion
- To separate school from leisure (lack of rhythm)
- Practical subjects (music, physics)

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Thank you!

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