

CCSE

Center for Computing  
in Science Education



# Status CCSE 2022

Develop materials  
and methods

Build educational  
research group



CCSE Centre for Computing  
in Science Education

**Vision** “an **international hub** for **research-**  
**based integration** of **computational**  
**methods** in education”

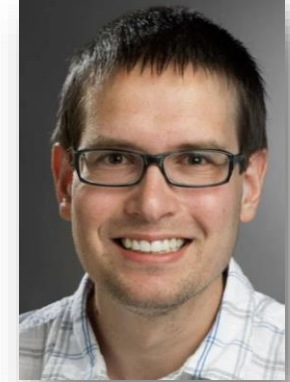
Build culture for  
teaching and learning

Disseminate nationally  
and internationally

# Activities 2022

## CCSE

- Hired Karl Henrik Fredly (PhD, KD)
- Hired Henning Myhrehagen (PhD, DKOMP)
- Incoming Fulbright Fellow: Ben Zwickl



## Workshops/conferences organized

- Nordic Regional Learning Assistant Workshop (June)
- Oslo PER Summer Institute (June)
- Quantum computing (November)



# Nordic Regional Learning Assistant Workshop

- Two-day workshop
- CU-B facilitators
- Participants from Nordic countries



Financed by: CCSE & NRC Intpart project (2019-2022)



# Nordic Regional Learning Assistant Workshop

	Monday, June 13	Tuesday, June 14	Wednesday, June 15	Thursday, June 16	Friday, June 17
TIME	Day 1: Computation in Physics Education	Day 2: Informal physics ed	Day 3: Exploring Oslo	Day 4: Laboratory Instruction	Day 5: Upper-division Instruction
9:00-9:30	Introduction and program logistics				
9:30-10:20	Plenary 1: UiO	Plenary 2: MSU	Lightning talks, Part 1	Plenary 3: CU	Plenary 4: OSU
10:20-10:40	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:40-11:30	UiO Post-plenary discussions	MSU Post-plenary discussion	Lightning talks, Part 2	CU Post-Plenary discussions	OSU Post-plenary discussions
11:30-13:00	Lunch	Lunch	Lunch	Lunch	Lunch
13:00-15:00	Workshop Strands	Workshop Strands	Explore Oslo!	Workshop Strands	Workshop Strands
15:00-15:30	Snack Break	Snack Break		Snack Break	Snack Break
15:30-17:00	Presentation: Norway	Poster Session		Open collaboration time	Workshop Closing!
Aftnoon & Evening	Dinner on your own	Tapas at CCSE	Dinner on your own	CCSE Hosted Dinner	



**Monday:** Computation (UiO Keynote)

**Tuesday:** Informal physics education (MSU Keynote)

**Wednesday:** Physics education research beyond cognitivist theories of learning

**Thursday:** Laboratory instruction (CU Keynote)

**Friday:** Upper-division physics education (OSU Keynote)



Financed by: CCSE & NRC Intpart project (2019-2022)

# Activities 2022

## S-ASSESS (NFR FinnUT 2018-2023, 10Mkr)

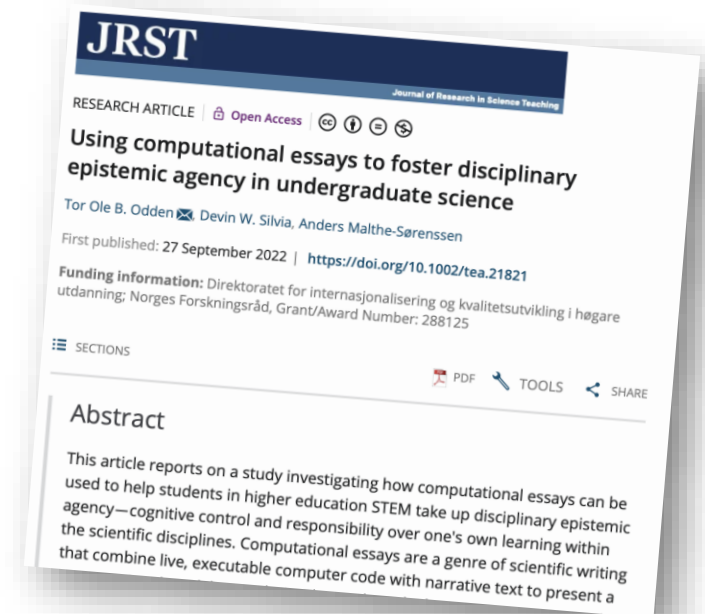
- 3 yr researchers (2021-2023): Hannah Sabo
- 1 yr researcher (2023): Not hired

## ProFAG (DKOM, 1-2Mkr/yr)

- Kompetansepakke for lærere (UDIR)

## Publications:

- Computational essays and student agency
- NLP applied to science history



# Plans 2023

- Unknown factor 1 – outcome of new SFU application
- Unknown factor 2 – financial planning
  
- New education research projects
  - Computational essays / computational literacy (Karl Henrik)
  - Applications of NLP (NN, Postdoc)
  
- Ongoing research projects
  - School implementation / DKOM (Henning)
  - Chemistry (Andreas)
  - Assessment (Hannah)