



INTED

SENTER FOR TVERRFAGLIG UTDANNING



SENTER FOR
FREMRAGENDE
UTDANNING



26 500 students
7 200 employees
219 study programs
512 PhDs/year

#74 on Shanghai²⁰²⁴
107 ERC projects
5 nobel laureates

The Guild
Circle U

Honours programs: 1
Honours certificates: 4





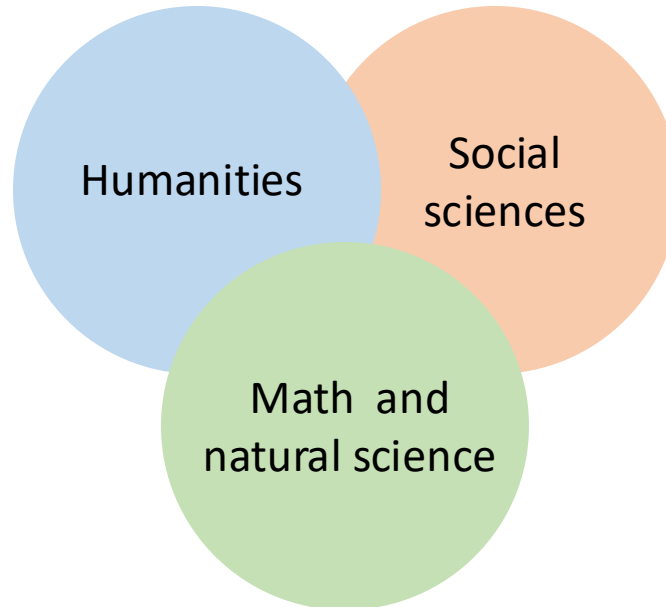
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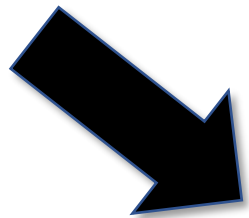
SENTER FOR
FREMRAGENDE
UTDANNING

1 of 10 Centers for Excellence
in Education in Norway





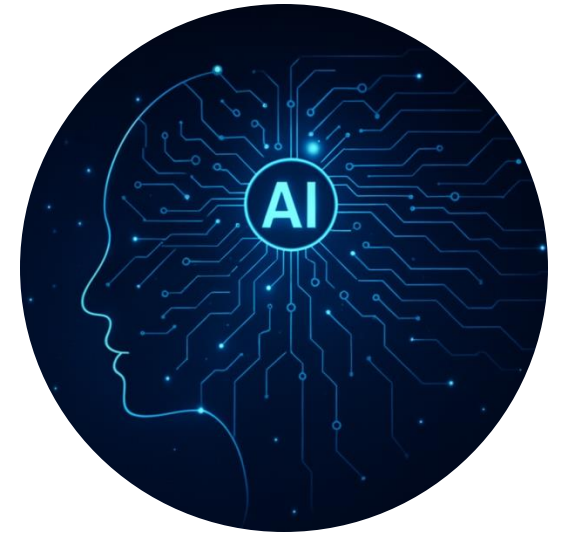
Grand societal
challenges



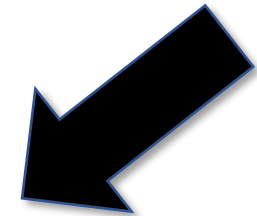
Research and
innovation



Worklife
requirements



Artificial
intelligence



Interdisciplinary competence

Interdisciplinary competence is “the capacity to **integrate** knowledge and modes of thinking in two or more disciplines .. to produce a cognitive advancement, .., in ways that would have been impossible or unlikely through single disciplinary means”

Boix Mansilla, 2007

Intended outcome: For students, teachers, administration, leadership and stakeholders to develop interdisciplinary competence and to participate in, facilitate and lead interdisciplinary processes.

Develop programs, methods, pedagogies and approaches for interdisciplinary education

Establish a **community and culture** for interdisciplinary teaching and learning

Goal: Research-based integration of interdisciplinary competence in higher education

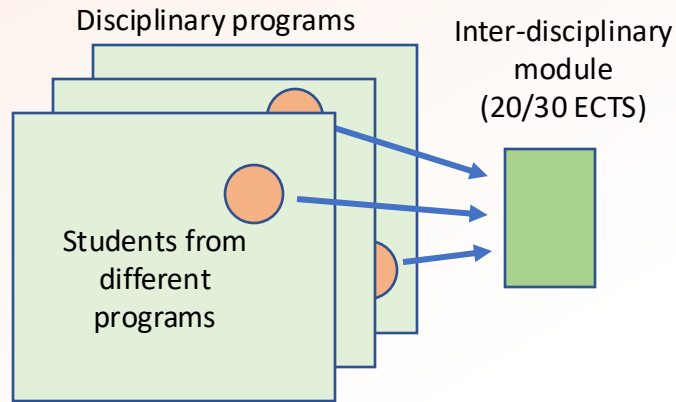
Disseminate methods and approaches to interdisciplinary education locally, nationally and internationally

Measure the impact of our activities and build a **research basis** for interdisciplinary teaching and learning

Develop programs, methods, pedagogies and approaches for interdisciplinary education

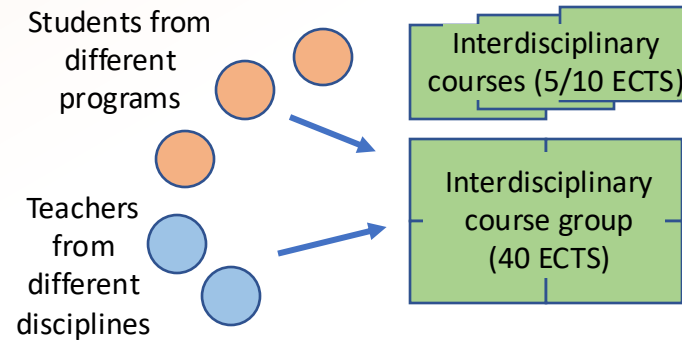
Students develop interdisciplinary competence through
integration, interaction and reflection

Program scale



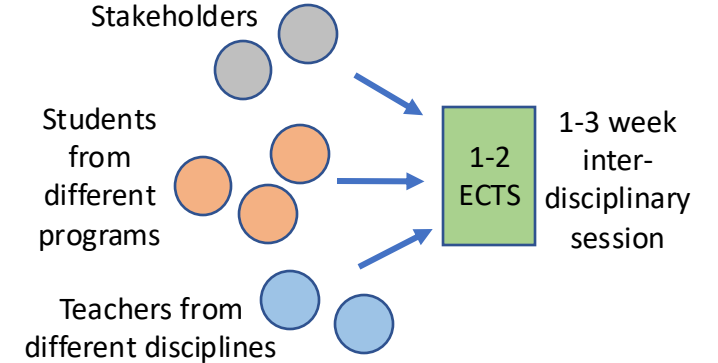
Interdisciplinary basis: Students from different programs take the same courses (preprogrammed)

Course scale



Interdisciplinary basis: Students from different programs take the same courses (elective)

Session scale



Interdisciplinary basis: Students from different programs take the same session (elective)

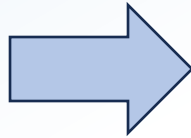
Establish a community and culture for interdisciplinary teaching and learning

Supporting change

Pedagogical advice

Training

Building
community



Interdisciplinary facilitator program

Based on Learning Assistant model (UC-Boulder)



Three principles:

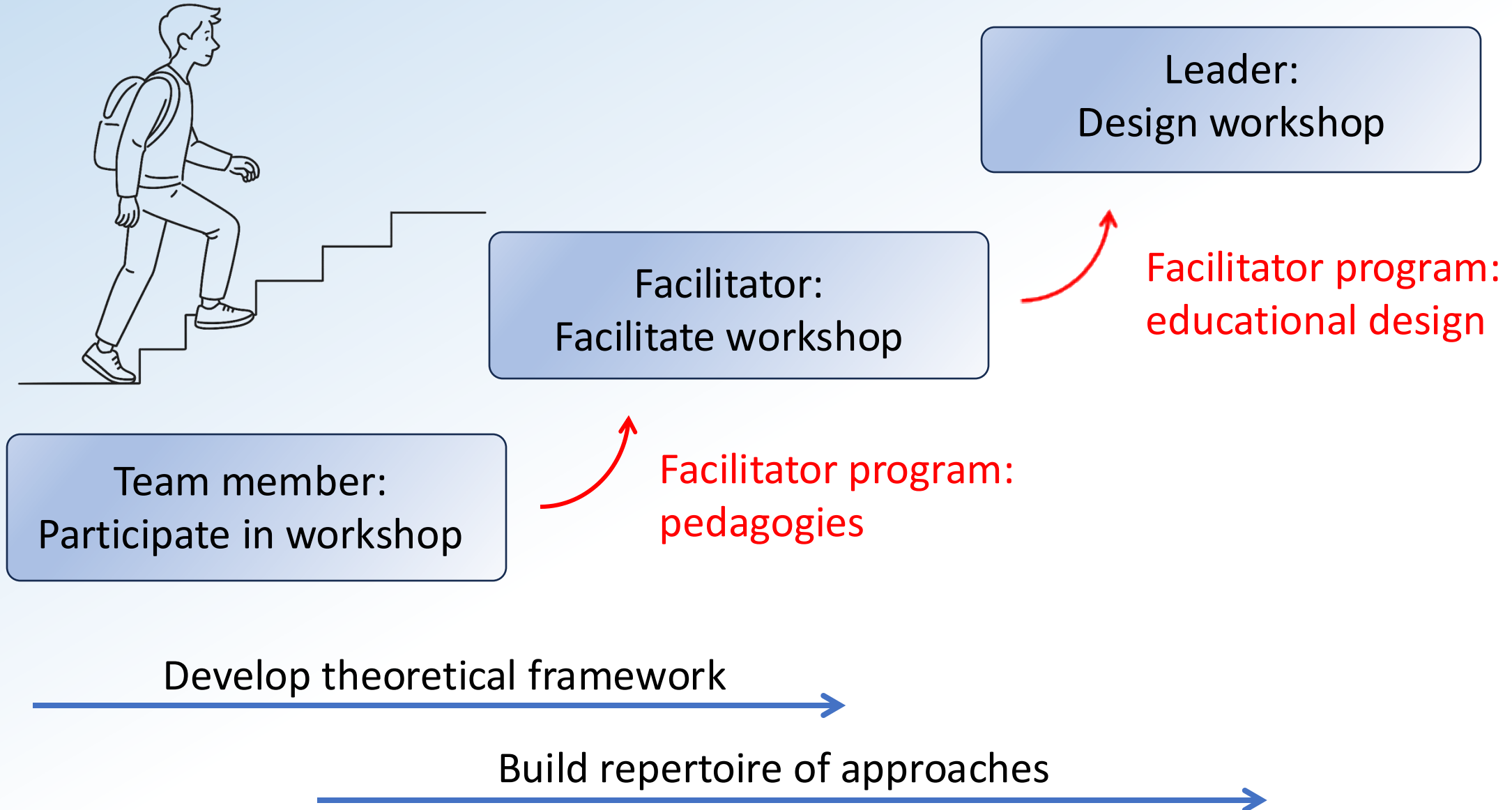
- Pedagogical training
- Regular meetings
- Teaching in active learning environments

Establish community of practice



Establish a community and culture for interdisciplinary teaching and learning

The interdisciplinary skills ladder



Measure the impact of our activities and build a research basis for interdisciplinary teaching and learning

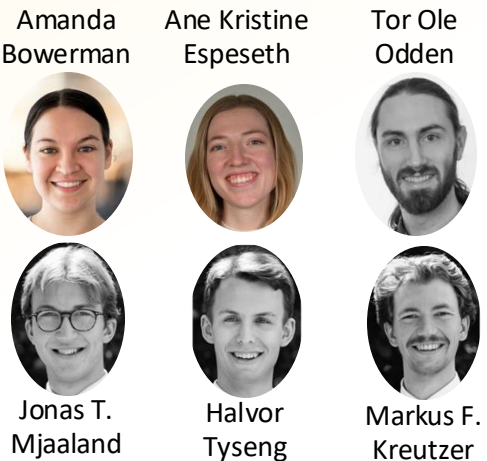
Interviews
Surveys



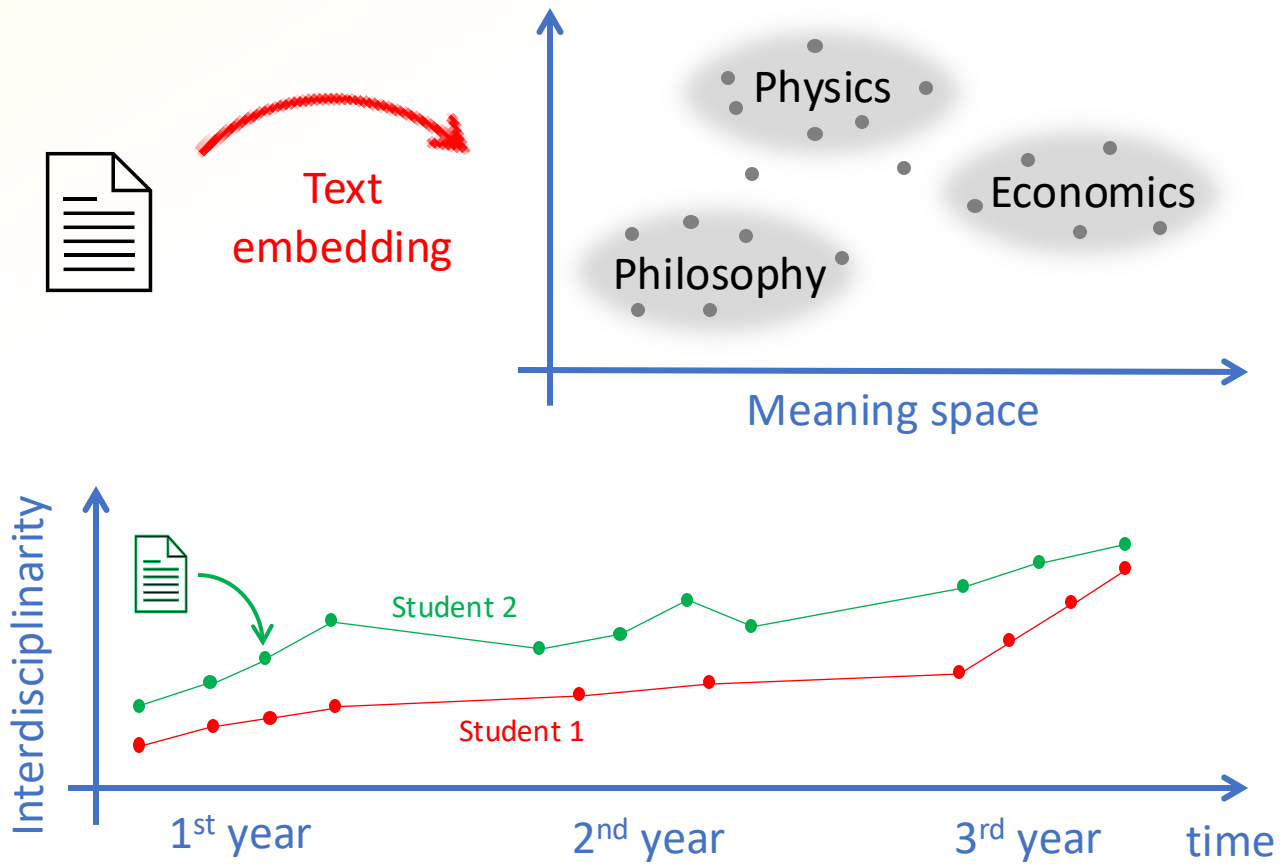
Interdisciplinary
facilitator
program



Text analysis



Qualitative research at scale using text embeddings



Odden, Tyseng, Mjaaland, Kreutzer, Malthe-Sørenssen, Using text embeddings for deductive qualitative research at scale in physics education, *Physical Review Physics Education Research*, **20**, 020151 (2024)
Mjaaland, Kreutzer, Tyseng, Fussell, Passante, Holmes, Malthe-Sørenssen, Odden, Scalable and consistent few-shot classification of survey responses using text embeddings, *arXiv:2508.19836* (2025)

Disseminate methods and approaches to interdisciplinary education locally, nationally and internationally



The Honours Conference 2025: Students Facilitate the Future



Develop programs, methods, pedagogies and approaches for interdisciplinary education

Establish a **community and culture** for interdisciplinary teaching and learning

Vision: Become a national and international hub for the research-based integration of interdisciplinary competence in higher education

Disseminate methods and approaches to interdisciplinary education locally, nationally and internationally

Measure the impact of our activities and build a **research basis** for interdisciplinary teaching and learning