

# Experts in Teamwork

Experience based master course in interdisciplinary collaboration

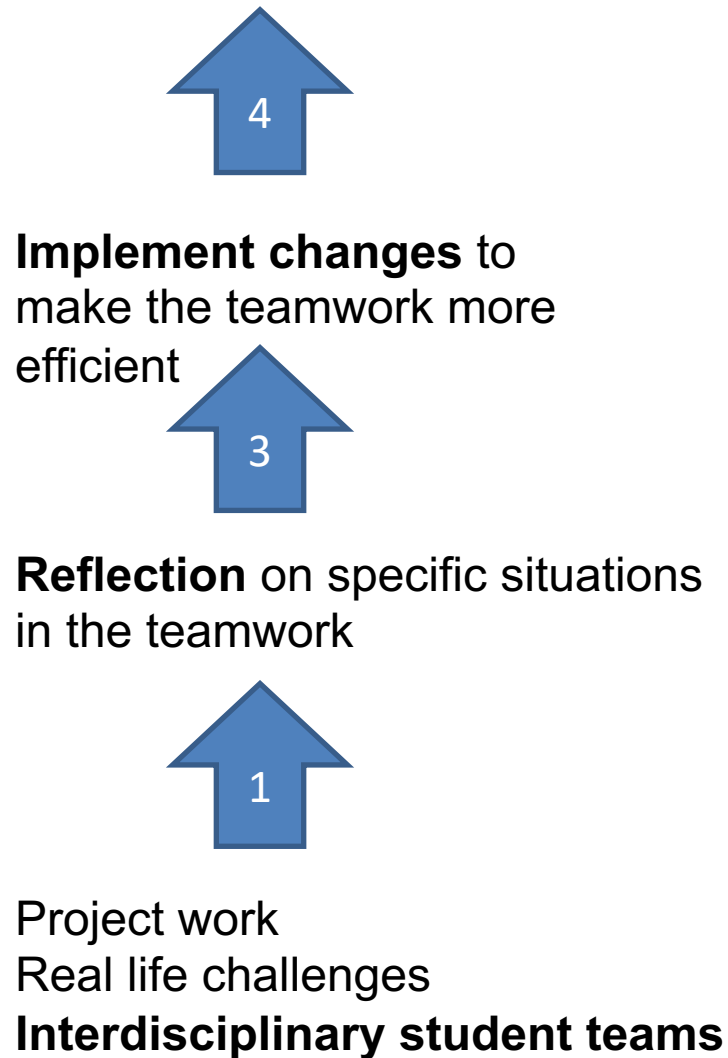
Bjørn Sortland

Presented at CDIO-seminar  
Chalmers October 17



# Interdisciplinary teamwork skills

# 21st century skills



Help the students to see how their teamwork is influenced by their own behaviour

**Facilitation**  
Make it allowed and secure to talk about the relationships

Learning through practice

# 21st century skills

From Trilling & Fadel, 2009

- Oral and written communication
- Critical thinking and problem solving
- Professionalism and work ethic
- Teamwork and collaboration
- Working in diverse teams
- Applying technology
- Leadership and project management

# «Experts in Teamwork» at NTNU, Trondheim

Initiated in 2001 on demand from business  
and industry

**2020:** 2800 participating students  
100 villages, 3 campus cities  
Teaching staff ~ 325 people in total

**Obligatory part of all Master's Degrees;  
students from all 8 faculties - interdisciplinary**

**Villages ≈ classes ≈ (20-30 students) divided  
into smaller interdisciplinary teams of 5-6  
students**

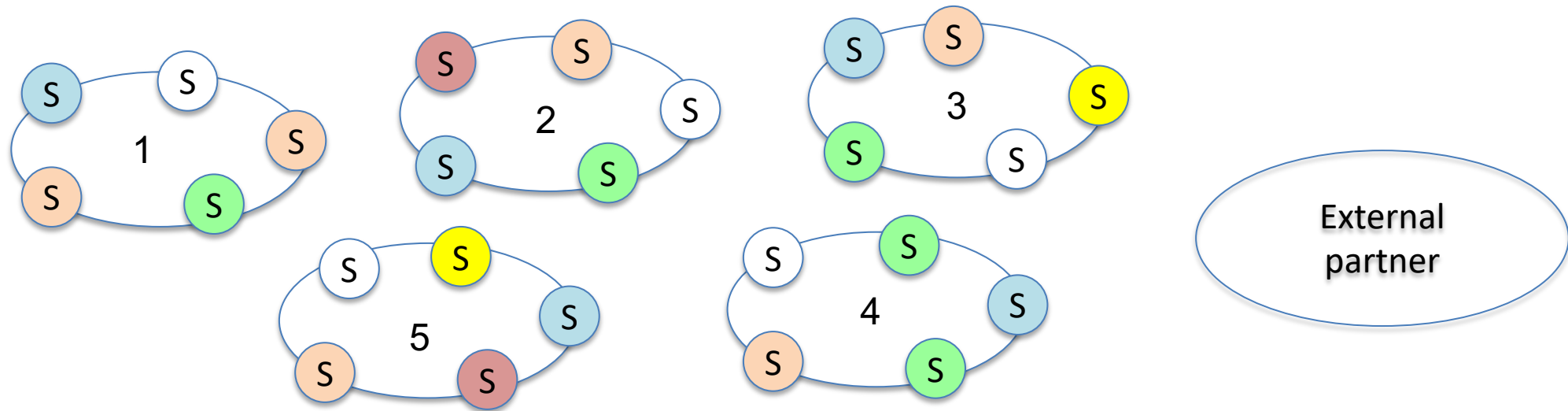
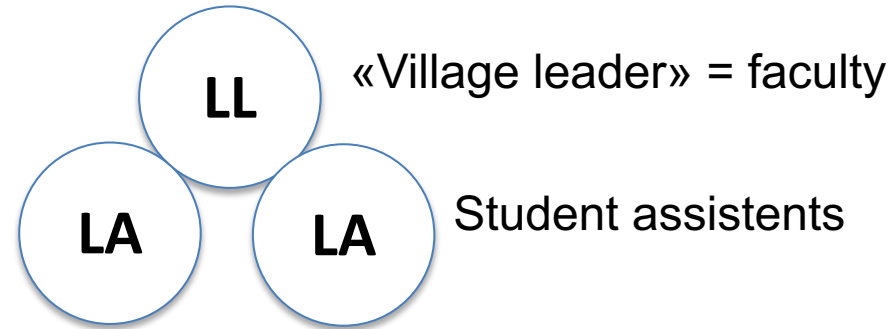


# EiT village = master course

Village theme:

[Innovation in health care](#)

[Energy Transition - Thinking Green](#)



25 – 30 students from different programs

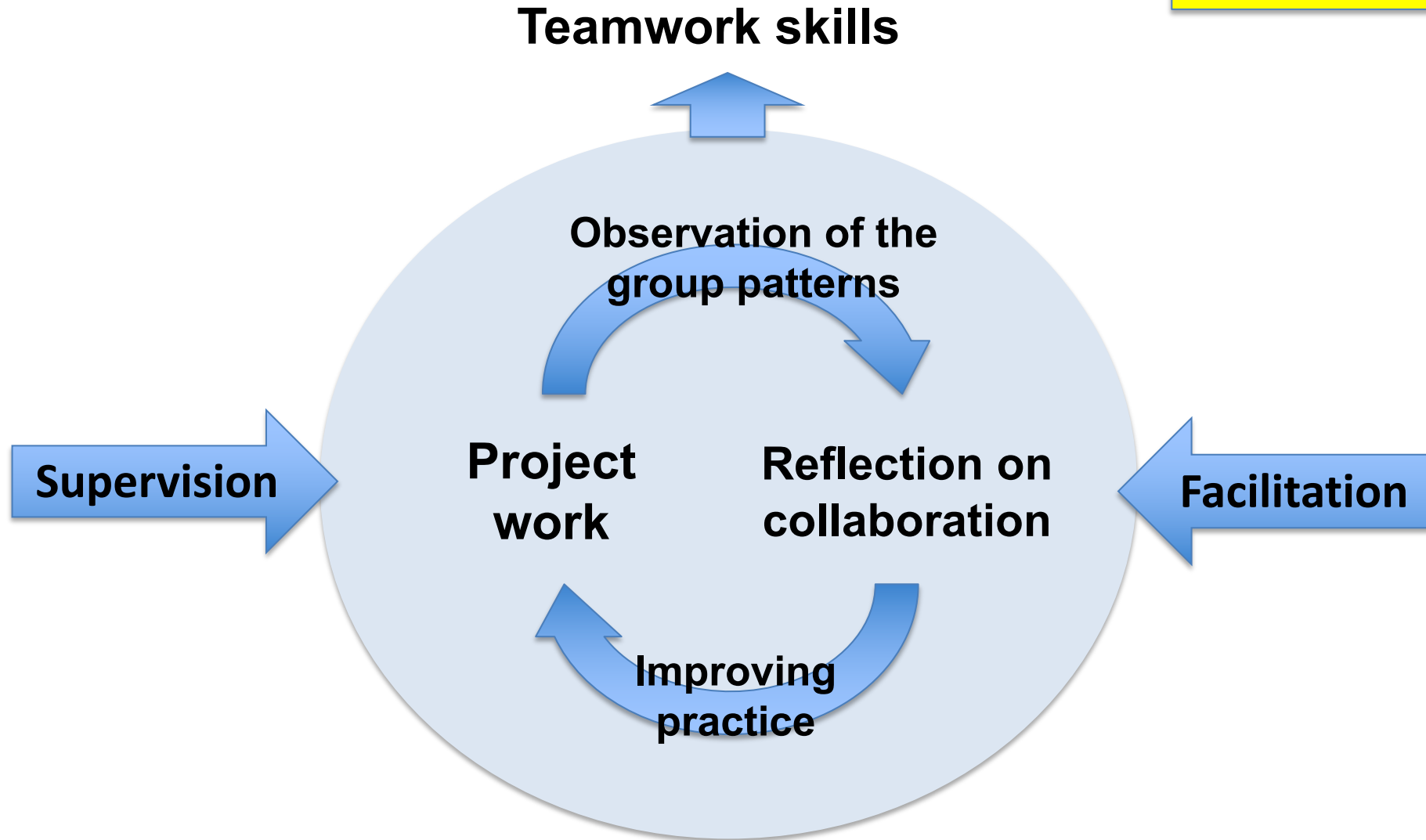
# AIM: Improved teamwork skills

## Expected outcome:

- **Behavioural changes in team work skills towards higher productivity in a supportive environment**
- **Metacognitive perspectives: Experience based concept formation**
- **Improved collaborative skills that may translate into new, future work-life situations**

# Experiential learning in EiT

A simplified version of Kolbs learning cycle



# Clarifying concept: teamwork skills

**Students' should be able to:**

- **SEE: Identify** key aspects of teamwork patterns and individual contributions
- **THINK: Reflect** on team features and contributions of self, others and team – obtain metacognitive perspectives
- **SAY:** Articulate constructive and supportive **feedback** to team mates and about the team as a whole
- **CHANGE: Modify interactive teamwork patterns** towards higher productivity within a positive social climate



# Scandinavian Experts in Teams network



The network's main objective is to train the students to utilize their academic competence in interdisciplinary settings, nationally and internationally, in order to reach enhanced project outputs. This is achieved by focusing on teamwork skills, i.e. increasing the students' awareness of how they contribute as collaborative members in a team.

The network has established an annual conference "Interdisciplinary Teamwork Skills for the 21st Century":  
NTNU Trondheim 2015, EAAA Aarhus 2016, Uppsala University 2017, NTNU Trondheim 2018  
DTU Copenhagen 2020

Cross-Scandinavian learning material and practical training of teachers in interdisciplinary teamwork skills:

<http://nordicexpertsinteamnetwork.org/>



# Needs for faculty development programs

- University teachers usually are unfamiliar with working with group dynamics – a prerequisite in fostering teamwork learning
- Before initiating experiential teamwork learning, faculty members should undergo some relevant training
- **AIM:** Develop facilitation skills in relation to group dynamics; get acquainted with group exercises, tools and inventories that may enhance teamwork skills learning

# Training facilitators at EiT/NTNU

## Common training over two full days

- Faculty members with diverse backgrounds
- Learning assistants (hired students)

## Separate training of learning assistants

- Practical training of facilitate student teams (roll play)

## EiT-book

- A resource book for faculty members supporting experience-based training; contains several group exercises and more

More information:

<https://www.ntnu.edu/eit>