

Session 4: Innovative T&L Methods

Peter Dalenius

Deputy Manager Didacticum

Our perspective as a TSDC

- We are not pushing any particular agenda or method.
- Our "test bed" for innovative teaching and learning consists of our own HE pedagogical courses, our seminars and our workshops.
- The most important work will always be carried out by committed individual teachers. Our task is to find the good examples, and give them a broader arena to spread ideas to the rest of the university.
- Some examples of recent work...

ALC (Active Learning Classroom)

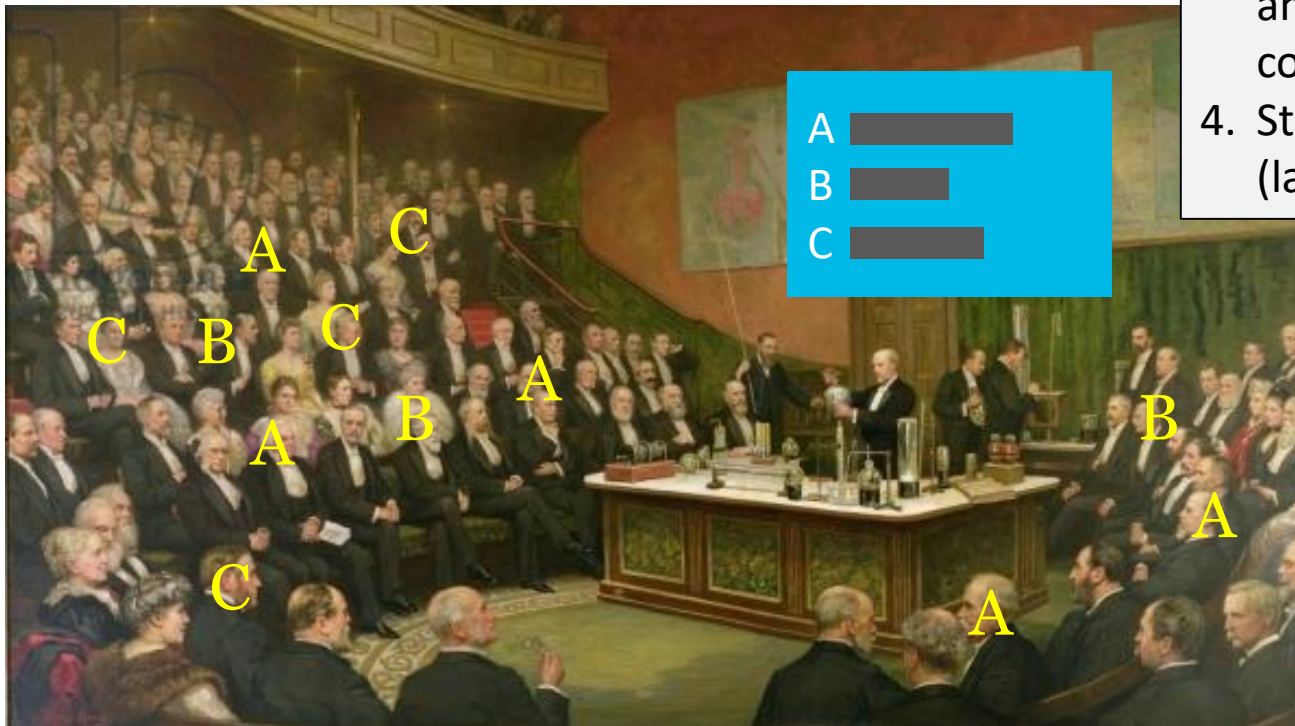


ALC (Active Learning Classroom)

- Dynamically switching between large group and small group interaction
- Technology that supports sharing of information within the small group, as well as with the whole class
- Changes the role of the teacher

Student response systems

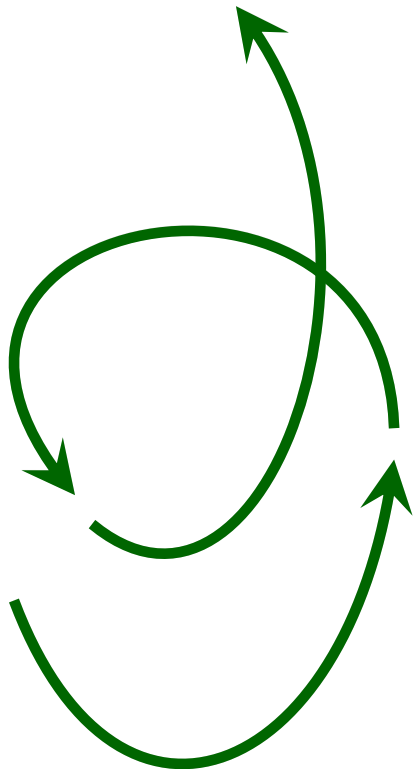
1. Present a question
2. Collect answers
3. Present the result – and face the consequences
4. Store and analyze (later)



2015-09-30
 Lorem ipsum
 A: 5 st
 B: 3 st
 C: 4 st

Henry Jamyn Brooks (1904) A Friday Evening Discourse at the Royal Institution

Student response systems



Collaborative learning

Open ended questions initiates discussion

Student influenced teaching

Real time evaluation of understanding

General observations

Presence, attention, fact checking

Deal, A. (2007) Classroom Response System Teaching with Technology, CMU

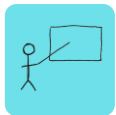
Flipped classroom

- Basic ideas
 - *Shift from teacher-centered to learner-centered*
 - *Redefinition of in-class activities*
 - *Content delivery outside the classroom, often in the form of videos*
- Some limitations
 - *Not all students can handle the responsibility*
 - *Watching videos is no more active than listening to lectures*

Flipped classroom

Example from an introductory programming course

- 2014



14 lectures

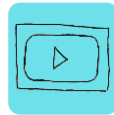


labs

2015 -



web-based self study material



10 videos, 5-10 min each



14 seminars, one per class, once a week



labs

www.liu.se