

# When I flipped

...my experiences  
in combining flipped  
and peer learning

CASE: Vesi- ja  
ympäristötekniikka

# BACKGROUND: more with less

- Large course (150 students) + our only compulsory Bachelor level course
  - à Comprehensive view on our field: visiting lecturers
- New, broader Bachelor programmes mean that part of the students not so interested in this theme...
  - à UNDERSTANDING: basic knowledge of our field for all the students (as B.Sc students should know all programme fields)
  - à MATCH-MAKING: course inspires 'suitable' students to take our elective course + select our Master's Programme
- Aim = learning (even by accident), not just passing the course

# METHODS

- Course has two main themes
  - 1) Context: VESI & YMPÄRISTÖ } *Reading circles + lectures*
  - 2) Methods: TEKNIKKA } *Weekly exercises*
- READING CIRCLES (RC) + LECTURES make use of group work, peer learning and flipped learning
- EXERCICES done the normal way i.e. individually (students: "Let us do something alone, too!")
- ASSESSMENT: 50% + 50%, half of the RC grade coming from self- and peer assessment, which also includes group working skills
- More: <https://mycourses.aalto.fi/course/view.php?id=5946>

# PREPARATORY READING CIRCLE?

- Flipped learning
  - à Material given one week before the RC: combination of theory and practice (news stories, videos, legal docs etc.)
  - à Read independently before the RC meeting

*Ok, but how then to go through the reading material with 150 students?*

- Peer learning through reading circle groups (in total 20 groups)
  - à Clear instructions (incl. team roles) + guiding questions
  - à Quick recap through Presemo: each group lists two insights and/or questions, or participate in a poll (more: [presemo.aalto.fi/enyc2003](http://presemo.aalto.fi/enyc2003))

# READING CIRCLE → LECTURE

## LUKUPIIRI 60 min

Opiskelijat itsenäisesti omissa ryhmissään, mutta samassa tilassa.

Keskustelu etukäteen annetun ja itsenäisesti luetun lukumateriaalin perusteella  
→ Luennoitsijan antamat ohjaavat kysymykset

Keskustelun pohjalta ryhmät listaavat Presemoon kaksi keskeistä teemaa / kysymystä

ITSENÄISESTI RYHMISSÄ

## KESKUSTELU

~30 min

Lukupiirissä esiin nousseiden kysymysten purku yhdessä luennoitsijan kanssa, Presemon avulla ja vuorovaikutteisesti (ryhmät perustelevat kysymyksensä + kommentoivat muiden kysymyksiä)

LUENNOITSIJA PAIKALLA

## LUENTO

~30 min

Keskustelun loppuksi tiivis luento, joka kertaa keskeiset teemat ja varmistaa, että ne jäävät mieleen.

Luentokalvot toimivat opiskelijoille myöhemmin myös ko. teeman yhteenvedona.



# CONCLUSIONS: benefits

- Preparatory Reading Circle works!
- More interactive way of learning, with no additional resources
- 'Learning by accident'
- Combination of group work and individual assignments = 'good'
- Feedback group very useful
- Work load more even throughout the course(students & teachers)



# CONCLUSIONS: challenges

- Planning took quite lot of time, but only for the first time
- Lectures still not working as interactively as I hoped (and planned)  
à Requires time and change in mindsets, for both students and teachers (hopefully pays off during later courses)

? Group work results in more even grades



# CONCLUSIONS

- Simple thing: requires most from us teachers
  - à Change in mindset: teachers should not and must not guide and control everything; students also learn from each other and without teacher
  - à Courage, openness, trust
- "Let them do it"
  - Finding out and learning together with peers
  - Peer pressure works! (e.g. reading the given material)
  - Also assessment of learning
    - à Giving students more responsibility for learning must be coupled with similar responsibility for assessing it



THANKS!

Happy to hear  
your experiences  
+ discuss more!

[people.aalto.fi/marko\\_keskinen](http://people.aalto.fi/marko_keskinen)

[marko.keskinen@aalto.fi](mailto:marko.keskinen@aalto.fi)



@keskma