Extending the Boundaries of Higher Education through Digitalization:

On the best practices of Online- and Blended Learning

Emil Alégroth, Anna Eriksson and Åse Nygren

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Context

PA2552: Software Testing

- Traditional lectures
- Online teaching
- Hands-on assignments

Blended learning

- Traditional lectures
- Other teaching approach
  - Online
  - PBL
  - Flipped-classroom
  - Etc.

Key aspects of my approach

THEMES

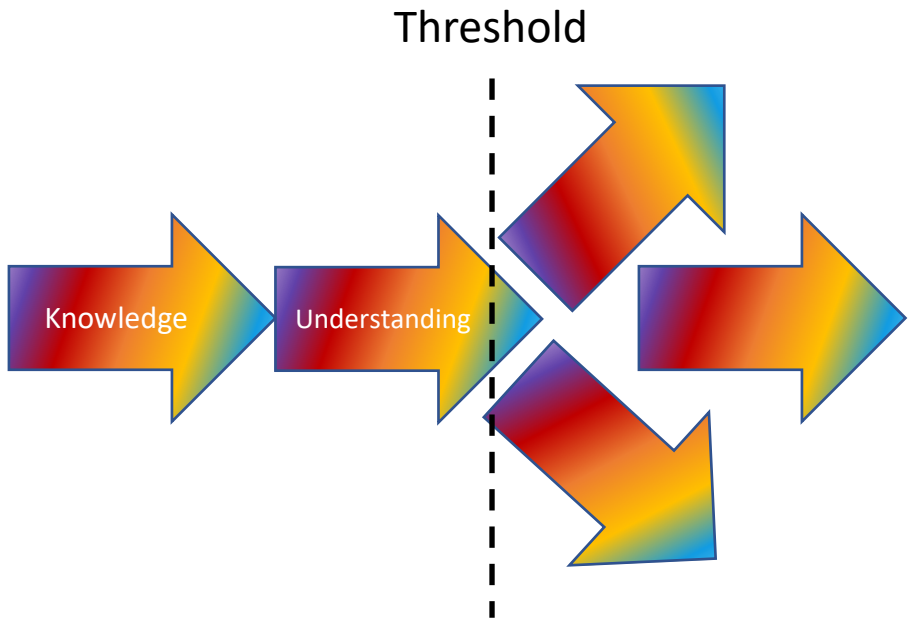
- 2 weeks
- Subject focus
- Assignment
  - Formative

BLENDED LEARNING

- Traditional classroom lecture
- Online lecture
  - Partially improvised
  - Focus on deeper learning
  - Student-driven
  - Technical

RAPID RE-ASSIGNMENTS

- 2 re-assignments per assignment
- Based on what most students failed
- Threshold concept understanding



Study and results

- 78 questions
- Sample frame (N=42)
- Sample (N=19)

ARCHETYPE STUDENTS

- **Type 1:** Negative
- **Type 2:** Positive (new tech)
- **Type 3:** Positive (slow switch)
- **Type 4:** Positive (like 3 but has some experience)
- **Type 5:** Positive (experienced)

CHALLENGES

- Lack of physical presence (Communication with teacher)
- Keeping students engaged in online lectures
- Dependency on used tool for teaching
- Tools don’t work on all platforms
- Writing questions
- Note-taking during lectures

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Norms?

CORRELATIONS

- Prev. exp at BTH - Helpfulness
- Intrinsic motivation - Experience
- Attitude towards Digitalization - Experience
- Early Tech-adopter - Experience
- Use of online platforms (e.g. YouTube) - Experience

Previous experience plays only a minor role, **motivation** and **use of digital platforms** a larger role.

Best practices

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Questions and discussion

Emil.Alegroth@BTH.se
Anna.Eriksson@BTH.se
Ase.Nygren@BTH.se