

Activation of Engineering Students with Clickers

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Introduction

The fundamental purpose of this pedagogical project is to activate engineering students by experimenting with clickers - electronic voting system.

Platform

Materials Chemistry, 6 ECTS points
29 engineering students
15 weeks, 4 hours teaching each week

Problem formulation

- The subject was often misunderstood a matter of memorizing information.
- In the last year, too much attention was put on calculation assignment rather than fundamental understanding



Structure

08:00-09:00 plane lecture
09:00-10:00 group discussion
10:00-11:00 quiz competition
11:00-12:00 calculation assignment

Evaluation

- Mentimeter or Doodle
- Yellow post-it
- Digital questionnaire

Results

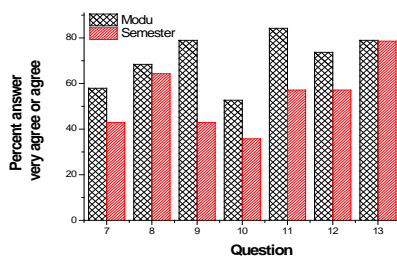


Fig. 2. Evaluation comparison

Plan / Theory

The modification was based on UVP.

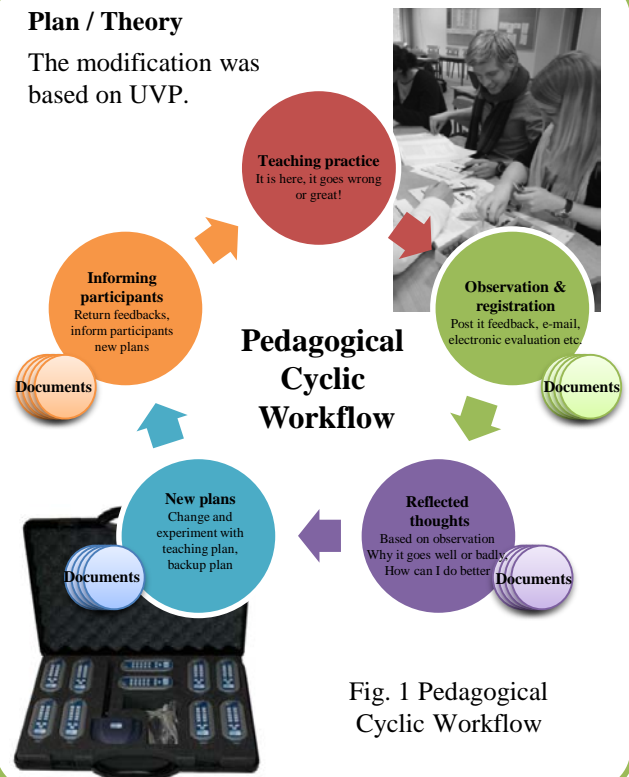


Fig. 1 Pedagogical Cyclic Workflow

Reflection

- Group discussion and video clips are very popular and productive among engineering students.
- Evaluation provides valuable information; however it is not natural for students.
- Any teaching tool is to assist education rather than slowing down the process.

Literature

- Model for undervisningsportfolio (UVP) i ingeniøruddannelserne, Ingeniør Uddannelsernes Samråd (2008)
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