

***Flipping the Classroom* evaluation summary**

Context and Intervention

Flipping the Classroom was implemented in the Faculty of Science elective The Scientific Advisor (block 3, 2016-2017). During the online sections of the course, IT tool Scalable Learning was used to enrich knowledge clips with interactive elements. The face-to-face sessions were enhanced by the Active Learning Classroom at the Teaching and Learning Lab, as well as the Radar and Reflector tool, which allows students to rate themselves and each other on various collaborative skills.

(presumptive) Mechanism

The main objective was to make classroom teaching more student-oriented and engaging. The most important expected result of these interventions was for students to have more positive experiences in the classroom.

Results

The students (N=25) indicated on their surveys and in focus groups that the use of Scalable Learning helped them prepare for the workshops, which in turn helped them understand the content of those workshops. They also felt that the tool helped them engage with the subject matter more actively. Concerning the Active Learning Classroom, students reported that the design of the room resulted in more and better interaction with the teacher and enhanced their collaboration with their fellow students. The design of the room also made it easier to ask questions. This increased the students' general enjoyment of the course. The Radar and Reflector tool helped students perceive and understand group interactions but did not do as well at improving their engagement with and enjoyment of the course. Interviews conducted with the teacher and the three student assistants produced of largely similar (positive) signals.

Standout results

Setting deadlines motivated students to watch the knowledge clips.

- The most engaging knowledge clips had companion exercises, though students didn't see the point of exercises that aligned poorly with the knowledge clip.
- Students in the Active Learning Classroom were triggered to engage and focus by the sight of their peers doing likewise.
- Male students seem slightly more positive about the Active Learning Classroom than female students.
- Some students found the Active Learning Classroom distracted them from their advisory assignment.
- Students mostly appreciated the Radar and Reflector tool when group interactions were already mostly pleasant, especially considering that the survey results affected their grades.

Important footnotes

- The number of survey participants is limited.
- It is possible a novelty effect coloured student impressions of the Active Learning Classroom, resulting in more positive evaluations.
- The teacher expended considerable time and effort on course adaptations to make the most of the room's design.

Tweet (280 character limit): More interaction, cooperation and engagement by Flipping the Classroom with knowledge clips, reflection and an Active Learning Classroom at the Faculty of Science.

The course evaluation follows.