

Lessons Learned From a Practice-Based Design Engineering Course

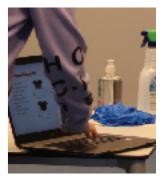
- Equipping the students to be critical and independent evaluators of their and others' works, higher education prepares them for the world's changing values. The Covid-19 pandemic illustrated that higher education itself was not ready for the unexpected changes.
 - Mid March 2020, the Dutch Government announced lockdown and suspension of education at all levels. It was only six days before the in-class peer testing* activity of the *Design and Meaning* course of Industrial Design Engineering program of the University of Twente.
- While the new situation pressured academia to find creative ways of teaching and testing, students had to cope with the uncertainty created by this transition in education.
 - The topic course of this paper is the first course of the relevant IDE educational programme, in which 'peer-testing of prototypes' is employed as an assessment method.
 - The course is naturally short (see below schedule), due to the program's requirements; with peer-assessment at the core of the practice assessment.
 - In 2020, peer-testing of prototypes had to be deployed via online tools and asynchronously, by taking the students' preferences into account (i.e., explaining product in 2-min pitch video)



- After the announcement of the final grades, the students were asked their opinion about the application of on-line peer-testing.
- In total, *N*=24 students (out of 86) responded to the survey.







images from the in-class peer-testing activity of 2021

STUDENT CHALLENGES

- Lack of proper interaction made it difficult to understand the design process nor the product use.
- Low quality of feedback provided to their peers.
- It was disappointing not to touch and use the prototypes.
- Feedback became shorter and possibly less extended due to this lack of interaction among the peers.
- Challenging to explain their experience design concepts in a 2-minutes' video.
- Not to ask questions to the groups could have negatively affected the results of their peer assessment.

TEACHER CHALLENGES

Facilitate engaging and effective communication among peers

^{*}Peer testing is a method designed by the author to teach students user-testing of real products in classroom.