HOW TO TEACH (ALMOST) ANYTHING IN FABLABS

UNIVERSITY:

Université libre de Bruxelles

DATE:

20 October 2021, 14.00-17.00

LANGUAGE: English

TARGET GROUP:

25 participants max.

Teachers, professors, or educational practitioners who want to teach to their students technical and social skills relevant to the 21st century in a fablab environment.

AVAILABLE RESOURCES:

Website: made by the students related to the Cuban resilience (2019)

Paper: Denis Terwagne & Victor Lévy (2020). Fab for Kerala: how Teaching in Fablabs can help in the real world, the Making Of.

Website: made by the students related to the 2018 Kerala floods in India (2018)

REGISTRATION LINK

CONTACT:

Eric UYTTEBROUCK
Head of the Centre d'appui pédagogique (Teaching & Learning Center)
Eric.Uyttebrouck@ulb.be

BRIEF DESCRIPTION:

Facing an uncertain and rapidly changing future, Fablabs are a great environment to teach social and technical skills that are relevant for the 21st century. At Fablab ULB, Victor Lévy, a professor of architecture, and Denis Terwagne, a professor of physics, are experiencing and developing an agile teaching method to make students work with digital tools in interdisciplinary teams and to make a real-world impact.

During a semester, we guide classes of 20 to 50 students coming from different faculties such as Architecture, Sciences, Engineering, and Law. Students work in interdisciplinary teams of 2 to 4 students and work together developing open-source projects related to some real-world problem such as the humanitarian emergencies due to the Kerala floods that happened in India in August 2018 or the impact of digital fabrication on the Cuban Resilience.

Since this year, we are developing a new version of this class using a methodology that originates from **Fab Academy**, which is a model of globally distributed education through FabLabs. Courses/modules are taught by a variety of experts in their field at the destination of students of different disciplines. The students have to learn and integrate those new skills in a final project that is oriented towards their field of expertise and shared on the web for others to see.

We are happy to share the method we follow and our experience conducting this class and discuss:

- the power of digital fabrication tools through hands-on learning;
- the power of collaboration through digital tools and platforms (github, gitlab, git, ...)
- the power of interdisciplinary collaboration and how a diverse group of people can solve difficult problems
- the power of collective intelligence and sociocratic tools.

FOCUS ON INNOVATIVE PEDAGOGIES:

Technology-based pedagogical innovation: FabLabs
Methodology-based pedagogical innovation: Experiential learning design.