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Delivering remote food engineering labs in COVID-19 time, season 2

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ABSTRACT: After a “first season” of remote food engineering labs urgently realized during the first lockdown period in France (March 17 to end of May, 2020), remote food engineering labs were repeated and improved during the second French lockdown (from October 30 to December 15, 2020), thanks to the first session feedbacks. The main improvements were: work in smaller groups of students; more directive instructions; lighter content (less quizzes and optional readings) and a new/user-friendly training platform. It should also be noted that students and teachers were significantly more familiar with remote education and that the stress observed during the first lockdown was therefore significantly dampened.

SEASON 1:

Unit Operations: appertization of cans; concentration in a falling film evaporator; frontal filtration in a plate filter; spray drying

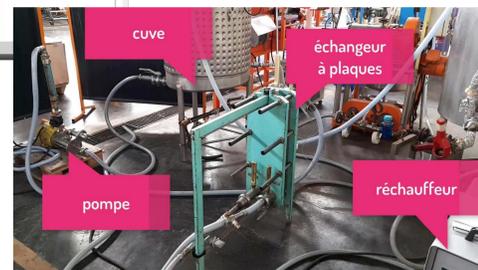
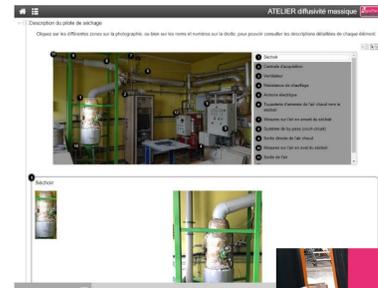
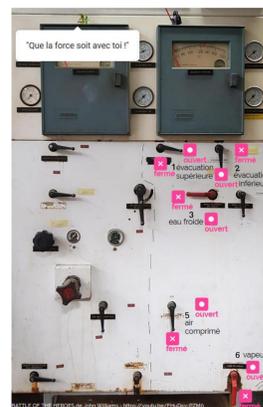
Tools:



Publication: DOI: 10.1016/j.ece.2020.10.002

Delivering remote food engineering labs in COVID-19 time
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Cadres, plateaux et plaques

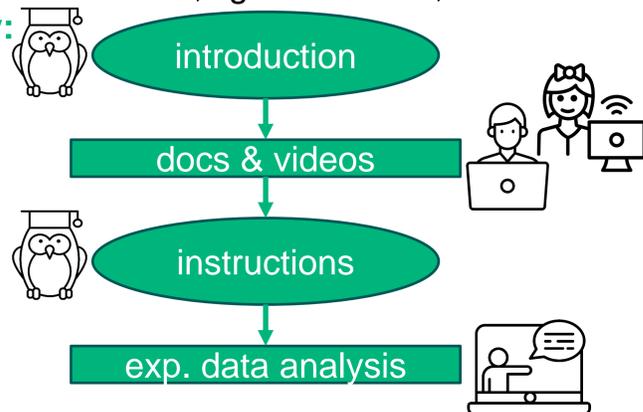


SEASON 2:

Unit Operations: SAME + plate heat exchanger; fixed bed dryer (3 to 4 hours depending on the module)

Improvement: smaller groups of students (5 to 10, systematically with two supervising teachers per group); more directive instructions; lighter content; new/user-friendly training platform

Methodology:



Results: paradigm shift (relation between the teacher and the students); disparity between students (impossible for the teacher to provide the help that he could probably deliver in conventional conditions); marks (the number of very bad marks is unusually high); individual feedbacks (dramatically increase the work of teachers)

PERSPECTIVES, SEASON 3:

With the school moving during summer 2022, the teaching team is already thinking about a “season 3” of remote food engineering labs. For some Unit Operations, there is *a priori* nothing more to change, as the pedagogical goals were obtained, and the students satisfied; for others, it is still necessary to review the adjustment of the schedule and the content offered.

Several teachers would like to further script the practical work and test immersive formats with Virtual Reality tools such as Uptale.

