

Question 1

“Hello Jean-Luc, would you introduce yourself briefly please ?”

Answers 1

“Hello, my name is Jean-Luc Wojkiewicz, I am a teacher in IMT North Europe. With the school’s PME (Pedagogical Multimedia Engineers), we first designed a MOOC* (massive open online course) entitled Fluids Mechanicals Introduction available on the FUN platform. Then, a serious game entitled Mission in Emousson in order to work with a inversed class mode where students are studying online in an autonomous way and the serious game onsite led by teachers.”

Question 2

“What is the origin of GRAIL project ?”

Answers 2

“In the first serious game version, we had pictures, photos and videos. Thanks to the GRAIL project, we wanted to immerse students in the Great Dixence dam reality based in Switzerland. First of all, we contacted the industrial in order to record 360° videos. In this way, students can travel around the dam sites : the dam itself, the pumping stations, the commands posts and productions factories. The issues setting down are pulled from reality and permit people to understand how the dam is working and learn about the safety instructions onsite.”

Question 3

“Would you tell us more about the Great Dixence ?”

Answers 3

“The Great Dixence is the highest dam of the world, this is an industrial site based in the Alpes heart. The drainage basin extends on more than 420 square kilometers and the factories produce more than 200 000 megawatt, it represents more than 400 000 households consumption.”

Question 4

“According to you, which is the added value of the GRAIL project to your class ?”

Answers 4

“In the first place, it permits to illustrate the fluids mechanics courses from real situations. Students are working in groups of four, they have to look for informations, modelize issues, resolve calculations and face reality.

The virtual reality provides students to realize the complexity of the industrial site and learn about energy production, safety onsite and global warming consequences. Students must write a report at the end of the project.”