

Games have a history of promoting engagement, and the collaborative elements help students develop social skills, and more specifically, escape rooms help develop skills in team working, creative problem solving and critical thinking. To that end, students in programme were engaged in an escape room activity in order to practice teamwork and communication, in other words, to strengthen group cohesiveness in a playful environment.

The escape room proposed was inspired in the secret of the Golden Ratio, which has intrigued mathematicians and artists alike for centuries.

The escape room experience began with players meeting their game master, who explained the rules of the game and what would happen over the next hour. The game master (i.e. teachers) introduced the background story:

*“The Conservation Department of the FUKO Museum” has to discover Da Vinci’s secret message. The game required students to find three hidden objects, solve challenging puzzles and teamwork. After they have unlocked all of the clues, then they must solve the mystery”.*

After doing so, the door was closed and locked and the countdown began. Within the game room, the participants dispersed themselves looking everywhere for clues, hesitantly at the beginning but more actively as time went on. Among these clues, students used technology and noticed symbols, numbers, pictures, etc., but with no evident reason to understand why these objects were there for. In other words, the first part of the game consisted on the search for clues, where well-communicate teams cried out whenever they found something, putting them all together in order to solve the puzzles. Players kept working together in order to solve the puzzles –without forgetting that one solution of a puzzle might lead them to other puzzles. Students had to open multiple locked boxes and solve mathematical puzzles. When players were stuck, they could get hints from their game master who monitored players. The puzzles contained in the game room became more complex when getting closer to the end of the game. Finally, the players found a code that revealed the golden ratio mystery that opened the door to escape. At the end of the game, the game master took some photos to show the group’s success.

Due to the excellent group work among the target students together with the great use of their academic skills and competences, the experience was a perfect way to promote communication and positive team dynamics among students.