



Using serious gaming to transfer knowledge and develop soft skills in postgraduate education

Joanne Craven, Gerald Augusto Corzo Perez, Poolad Karimi, and Ali Dastgheib
UNESCO-IHE, Delft, Netherlands

“Serious gaming” is gaming designed for a purpose other than entertainment and involves using board games, computer games and role-plays or a combination of all, for serious purposes, such as education, outreach, training, or decision support. It is argued that this approach provides a safe environment which facilitates group learning, allows for “learning by experience” in fields where long timescales or high risks make real experience impossible, motivates learners and stimulates players from different disciplines to share knowledge with each other.

UNESCO-IHE offers education to water sector professionals from around the globe. All the courses at UNESCO-IHE involve serious games in one way or another. A varied range of games is developed and/or used: the group sizes for the games range from 5 students to over 100. Sometimes they are used as simulations to illustrate feedbacks, tradeoffs, variability, uncertainty and other phenomena, create an awareness of multidimensional water related issues, and sometimes they are used to train and develop soft skills, such as interdisciplinary collaboration, creative problem identification and problem solving, teamwork and robust decision-making under uncertainty. Often, they are able to do both, which is a key strength of serious games as an education tool. These games are also been used in research and advisory projects as well to communicate research outputs to stakeholders and the public and together with them reach an optimum technical decision which is socially viable.

This session will discuss the experience with these games and what lessons can be learned for the future.