

# A Contribution to the Digital Transition in the European Water Education Sector

# Serious games for digital readiness of water education

#### **SMARTEN**

This project proposes innovative practices based on serious games in education, while addressing the subject-specific of water in line with European environmental and climate goals. The serious games concept has proved its efficiency in the educational sector, mainly in the engineering domain.

SMARTEN aims to impact the higher education on water:

- Leading to a better use of digital technology, not only in teaching and learning of water subjects, but also in improving education through better data analysis and foresight
- Developing skills and competencies necessary to support the digitalization of water education
- Supporting a growing generation of water professionals who are leading the digital transformation of the water sector



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### Summary:

Due to the COVID-19 challenge, education leaders must swiftly design responses with specific contexts in mind transforming traditional learning into online using e-modules. It is needed to establish effective forms of online education that will free up institutional capacities and resources in order to redirect their focus on delivering alternative (online) learning methods for students and LLL practitioners. Online learners should be motivated to take the course, to complete the course or to come back and attempt to do better. Adding game mechanics in course designing and behavior-based solutions can be solutions to immerse learners wisely. On the other hand, using a Learning Management System (LMS) with robust reporting and analytics will help us to track online learner performance and e-learning effectiveness.

## The targeted audience:

E-modules for serious games will be developed to motivate online learners (teaching staff, students, and professionals from water sector) to succeed and inspire them to achieve their true potential. In order to build skills, online learners should overcome a series of in-game obstacles.

#### The deliveries:

Using developed SMARTEN e-modules for serious games will have as a result that online learners get the immediate feedback, they need to identify areas for improvement. Also, they can see the outcome and repercussions of their behaviors before they enter the real world. Defined serious games methodology, way to get learning objectives and add game mechanics can help researchers to easily implement learning strategy in their scientific field different from water by taking the developed SMARTEN e-modules and their customization to their needs.



#### DETAILS

#### **PROJECT DURATION**

2021-03-01 To

2023-02-28

#### Erasmus+ Call:

KA2 - Cooperation for innovation and the exchange of good practices

KA226 - Partnerships for Digital Education Readiness

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