

# TEACHSUS PROJECT AND THE WATER MANAGEMENT EDUCATION

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*TeachSUS - Teaching and Educating for Sustainability (TeachSUS\_2018-1-RO01-KA204-049253) project has been implemented in the West Region of Romania aiming to design and implement a new teaching model for sustainable development at the pre-university level and to establish a coherent practical oriented structure as the Sustainable Excellence Center in Romania (located at the West University of Timisoara).*

*The project partners cover a wide range of educational levels, from pre-university level, to university and continuous learning and bring their experiences in diverse forms of education/training and support for youth and adults, from formal to non-formal education, talent management, career guidance and support, integration of young people into active life and professional activities, entrepreneurship, initiative support and integration in society. Both parts, the universities, companies and NGO's involved have a common (and long demonstrated) interest in improving education and experience in developing and providing new curricula and courses, in improving educational and assessment tools, individually and/or in cooperative projects.*



## TeachSUS project partners are:



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Companies involved in project bring specialized knowledge and expertise in sustainable development, quality management and development of information and communication technology tools for management and e-Learning. All partners bring in this project their experiences achieved from past European projects or from multi-stakeholders' initiatives or approaches and this competency mix ensure a high quality of the TeachSUS project results. Furthermore, created in benefit of trainers from non-formal education involved in all levels of education and will also ensure all premises for a wide cooperation with other stakeholders and a good promotion of these results.

In-line with the balanced network approach underlying TeachSUS consortium composition philosophy, all members participate in all the work packages, and each member will obtain the coordinating responsibility of at least one work package. UVT will take over the administrative coordination of the project, while Denkstatt will be responsible for the operative project management/technical coordination. Thus, the created international partnership of the TeachSUS project enable to support the following topics related to education for sustainable development in the context of Erasmus+ programme: creativity and culture; environment and climate change; quality improvement Institutions and/or methods (including school development).

In the project context, the TeachSUS skill card (Figure 0.1) shows the training programme structure. It consists of

Technical and Soft skills, each being divided into two categories: advanced and basic skills.

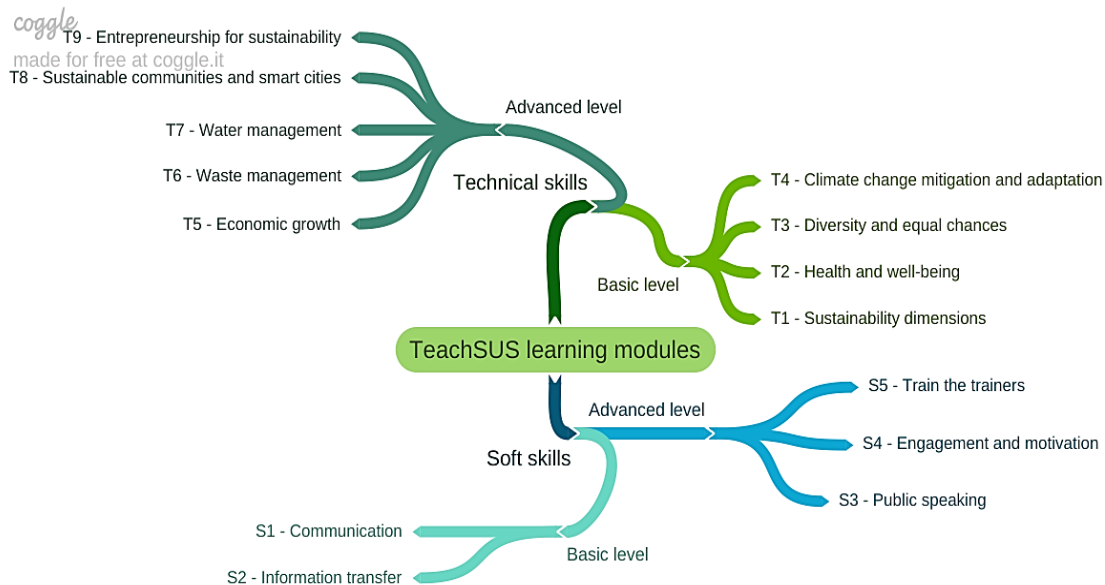


Figure 0.1 TeachSUS skill card (the training modules that define the training program)

In the context of the TeachSUS training program there have been developed a **Water Management Module**. The learning objectives (WHAT WE TEACH-LEARN?) are the following:

- (1) Students will acquire general knowledge about the physical and chemical aspects of water and will carry out experiments on the same topic;
- (2).They will be able to describe the most important aspects of the water cycle, and will link these aspects with the local water sources and their own supply systems;
- (3) Students will become more aware of the influence of climate (climate change) and weather conditions on local water supplies;

(4) Students will be able to distinguish between different types of natural sources of drinking water, will conduct experiments on how the soil purifies the water and will conduct primary water tests to identify water quality.

The didactical methods use (HOW WE TEACH?) for the case of different water management issues are: theoretical knowledge presentation (ppt); presentation and debates with an expert (an employee from the local company of water services); project and problem-based learning; experiential learning.

Most lessons are designed to create a real learning experience:

- In class, as a lesson associated with chemistry, physics (environmental sciences). In this case teachers are invited to use the already created educational resources and to imagine and implement projects topics and problem-based learning approaches;
- Outdoor lessons (e.g., visiting a water treatment plant, the laboratory for water quality or the water company in your community). For this type of lessons in Timisoara we are supported by the **Aquatim** company and **Aquademica**

foundation. Children, students could achieve knowledge at the **Aquapic** educational center (<https://www.facebook.com/aquapic/>) and by visiting and getting familiar with other water management infrastructures (as the Water treatment plant is in Timisoara).

In addition, a recent experience of Aquatim company and Politehnica University of Timisoara has been dedicated to the development of a series of workshops (mainly dedicated to students and specialists!) on “Water Loss Detectives” (<https://aquademica.ro/invitation-to-the-water-loss-detectives-2020/>).

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For more details and info, you can access the additional TeachSUS teaching, learning and assessment resources are provided by:

- The TeachSUS webpage, <https://www.teachsus.eu/home> from which teachers are directed to the following:
  - ✓ *Digital Library*, <https://www.teachsus.eu/digital-library>, consists of various type of resources (presentations, video, articles and other external resources);
  - ✓ *Intellectual Outputs* which are studies and research results on important topics related to education for sustainable development, <https://www.teachsus.eu/results>;
  - ✓ *Events and activities*, <https://www.teachsus.eu/events-and-activities> to get in touch with a large community of teachers, trainers and students;
  - ✓ *Dissemination*, <https://www.teachsus.eu/dissemination> to be informed though different actions that are taking place by the members of the TeachSUS international consortium;
- The *TeachSUS e-learning platform*, <http://teachsus.projects.uvt.ro/>, which includes all training materials, additional learning resources and assessment tests developed to support the TeachSUS training program. The materials are provided in English, Romania, Hungarian, Portuguese, and Slovenian;
- The *TeachSUS Facebook page*, <https://web.facebook.com/teachsus/>, which allows getting in touch with community teachers and learners in the field of sustainable development.

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**ACKNOWLEDGEMENT.** *This article is linked with the research activities related to the project: “Teaching and Educating for Sustainability” (TeachSUS\_2018-1-RO01-KA204-049253), founded with support of the European Commission. This paper and the communication reflect the views only of the authors, and the Commission cannot be held responsible for any use, which may be made of the information contained therein.*