

## RENEWTEACH

28.02.2022 - 27.02.2024

Facultatea de Psihologie și Științele Educației

Manager Proiect: Lect. univ. dr. Anișoara DUMITRACHE

Buget Proiect: 221515 euro

Buget UB: 37645 euro

Coordonator proiect: BURSA ULUDAG UNIVERSITESI - TURCIA

Parteneri proiect: OSMANGAZI ILCE MILLI EGITIM MUDURLUGU –TURCIA, GAZI UNIVERSITESI – TURCIA, UNIVERZA V MARIBORU – SLOVENIA, UNIVERSITATEA DIN BUCUREȘTI – ROMÂNIA, ASOCIACION DE LA INDUSTRIA NAVARRA - SPANIA

Climate change and environmental degradation has become a threat to the EU and the whole world. According to the EU European Green Deal, countries have turned to policies that prioritize clean and renewable energy sources in order to cope with this threat. Although policies for the use of RE resources have been defined and large investments have been made, one of the main drivers of the use of such innovations is public acceptance (Liarakou, Gavrilakis, & Flouri, 2009).

In the adoption of existing policies, the public can resist innovations. A number of studies have shown that public social acceptance is an important parameter in the use of Renewable Energy (RE) resources. In this context, it is extremely important to educate all segments of the public and gain positive attitude and knowledge towards RE. While realizing this development, it is necessary to design educational environments and to raise the awareness of teachers and teacher candidates who can be defined as change agents, who are the most important representatives of these environments.

Because, if teachers and pre-service teachers have sufficient knowledge and skills about RE resources, then their students' knowledge and skills will also develop and this change that occurs in the educational environment will spread to other parts of the society (Liarakou, Gavrilakis, & Flouri, 2009). Therefore, the Renewteach project has adopted the principle of "No person and no place is left behind" as stated by the European Green Deal. The project is based on four realistic needs analyses with a partnership structure that includes higher education and industry cooperation so that prospective teachers are not left behind in the context of RE. Firstly, when the relevant field literature is examined, it is stated that teachers and pre-service teachers in different branches do not have sufficient knowledge or skills about RE resources and there is a

need to increase their education level in this regard (Altuntaş & Turan, 2018). Second, researchers agree that this situation stems from the inadequacy of the curriculum and training related to RE resources. In

many countries, it is frequently emphasized that there is a need for a special curriculum that will develop students' knowledge and skills about energy education and focus on thinking skills in higher education (Mälkki, Alanne, & Hirsto, 2015, Güven & Sülün, 2017). Indeed, when examining the Erasmus project results, we did not come across a project that deals with the STEM-based RE context, which is the innovative aspect of this project. Thirdly, in the European Commission, Education and Training 2020 Working Group (WG) and Erasmus 2021 policies, in addition to local and global challenges at the European level, Higher Education Institutions (HEIs) to ensure their full potential is mobilized.

Finally, online survey results we have developed as project partners and the realistic data from the field showing that pre-service teachers within the partnership on an institutional basis, partners need an inclusive curriculum in the context of RE (Please See Report in Annex). For example, according to the survey results, the %87,7 of preservice teachers need an inclusive curriculum and learning materials to support the teaching of STEM-based Renewable Energy.

Thanks to this project, it was aimed to develop a curriculum on the subject of RE for preservice teachers studying in higher education in the context of the aforementioned needs in Turkey and partner countries. In this way, the curriculum needs of the preservice teachers participating in the STEM-based learning-teaching process on RE will be met and they will be provided with knowledge, skills and attitudes towards RE. It is expected that preservice teachers, who will be the

teachers of the future, will improve their professional and pedagogical knowledge level about RE, thanks to the project results. Thanks to the dissemination and sustainability of the results obtained in the project, it will be contributed to breaking the resistance in front of the social acceptance of the people.

In the Renewteach Project (2021-1-TR01-KA220-HED-000027614), four qualified project results will be developed: Curriculum and Training Program (PR1), Multimedia Based Online

Learning Content and Materials (PR2), Assessment Tool (PR3) Online Platform Content, Best Practices Pool - E-guide (PR4). In addition, 4 well-structured transnational joint partner meetings will be held to maximize communication and cooperation. In addition, 5 multiplier event and LTTA will be organized to enable a wide range of people to access and benefit from the 'RENEWTEACH' project. Within the scope of the dissemination and sustainability of the project results, various stakeholders such as teachers, teacher candidates, sector representatives and policymakers will be supported to access and use Renewteach project products.

The project's consortium is made up of public and private organizations from four countries: Turkey, Romania, Slovenia and Spain.

RENEWTEACH serve a purpose to build a capacity for the education sector at higher education level in partner countries.

In this way Preservice teacher's digital skills and STEAM skills in the context of RE will develop, and they will become equipped for RE. The development of the Preservice teacher's environmental friendly behaviors, digital and STEAM skills will be reflected into their teaching practices in their professional lives and, by being spread to different groups (peers, parents, etc.) via the students, prejudices hindering social acceptance will be overcome. In addition, by opening Renewteach products to stakeholder countries and external users, many teacher candidates and teachers will be able to access these contents digitally and cope with the risky situation caused by Covi-19 in the educational environment.

Thanks to the industry and field partners, the Renewteach project is expected to create synergy among different segments such as NGO, teachers, academics and policymakers.