PROJECT NUMBER - 2014-1-TR01-KA202-013113

O2 PURE-H2O e-learning portal

Web-site menus and sub-menus general content

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A common European learning and working area is one of the critical tasks posted in the EU's Lisbon Strategy. It aims to elevate Europe to the most competitive and dynamic knowledge based economic area and to make lifelong learning and mobility reality. The core of this concept coincides also with the National policy, performed in Turkey, as a candidate state. It includes an Accession Partnership, combined with a National Programme for the Adoption of Acquis. The project "**Implementation of ECVET for Qualification Design in Drinking Water Treatment Plants and Sanitation for Pure Drinkable Water - PureH2O"** includes environmental planning and education in the field of drinking water sustainable development. In the 9th development plan (2013-2020) of Turkey, one of the development axes in its main objectives is protecting the environment and improving the urban infrastructure. Complying with this, the rationale of the project is enhancing the quality and performance of VET system improving education in drinking water supply and development. It could be achieved through promoting creativity, innovation and transfer of EQF/NQF principles in education of the main target group in the sector.

One of the main focuses is to share EU experience in the field of education and training with lack of mutual recognition of qualifications often impaired by national restrictions. The project promotes application of instruments such as EUROPASS, EQF and ECVET. They all need to be tested on a broad basis at various countries and sectors in order to check their feasibility and practical application. This innovative practice is of mutual importance for Turkey and EC countries and is a complex one in respect to the type of the target professionals, working in this area.

Menu: Project

The objectives

The needed opportunity for improvement of transparency and recognition of qualifications is filled by the innovative PureH2O project through development of learning outcomes (LO) based training system and redefinition of competence standards. In order to achieve these set goals the PureH2O project peruses the following objectives:

1. Definition of joint LO based blended learning model in drinking water sector; establishment of innovative competence standards and qualifications' description approach in terms of content and target audience.
2. Adaptation and development of VET courses in accordance with the defined qualification model and implementation of EQF/ISCO/ESCO principles.
3. Use of ICT in training, teaching & learning activities. VET learning & teaching methodologies innovation. The PureH2O project major task to improve the VET trainers' competence is best welcomed, especially in the context of the links between theory and practice and the learner-centred approach.

To facilitate the improvement of VET system in Europe, the PureH2O consortium brings together 6 partners from Turkey, Bulgaria, and the Netherlands. The participating universities, R&D centres and SMEs provide the PureH2O partnership with expertise, enriched by the competence of the associated members.

To meet its objectives the PureH2O project focuses on:

- creating of blended learning programme by the PureH2O project consortium into the field of the drinking water plants;
- building a structured model following European Qualification Framework (EQF);
- formulating a skill passport combining common and novel documents presenting personal competency design;
- establishing a multilingual e-learning platform.

The tools for qualifications' description are tested in various countries and sectors to check their feasibility and practical value.

The exploitation & Use of the PureH2O learning outcomes gives prospects for successful post-project validation and accreditation of the new qualifications' recognition model and training programme, as well as for its future commercialization.

PureH2O new views

The education of VET professionals is a key development objective for building the EU knowledge society. The role of teachers, trainers and other training facilitators needs a change to respond to the latest scientific, technological and social changes. The European Education and Training 2020 policy has already performed some preparatory work and analysis of the situation in Europe. The various national needs were reflected in different qualification networks. The results indicate existing social needs for more subject-based and specific competences, linked to learning processes and curriculum outcomes, and less connected with the traditional educational schemes.

Since VET professionals are recognized as an important source of knowledge, the following basic requirements for changing the role of trainers are included in the Erasmus + programme: improvement of subject competence; establishment of links between theory and practice; and use of learner-centered approach. These requirements are applied to PureH2O target beneficiaries: teachers, trainers, learning facilitators, guidance professionals, school/institution managers and political decision makers.

Educational Transfer for Knowledge-based Economy

The PureH2O project philosophy is in compliance with the European policies for **investment in education** and innovation management for successful **transition to knowledge-based economy** and society.

The investment in education is a national priority for all European governments that commit to ensure conditions for VET system operation where the European reference levels and quality practices in training have priority.

PureH2O project uses the tools for qualifications recognition in the national and EU scale

European and National Qualifications Frameworks

European Qualifications Framework (EQF) provides a reference framework, which assists in comparison between national qualifications systems, frameworks and their levels.

The EQF framework translates qualifications by making them more understandable across different countries and systems in Europe. EQF promotes lifelong and life-wide learning, and the mobility of European citizens whether for studying or working abroad.

The EQF encourages countries to relate their national qualifications systems to the EQF so

that all new qualifications issued from 2012 on carry a reference to an appropriate EQF level.

European Credit System for Vocational Education and Training (ECVET)

The European Credit System for Vocational Education and Training (ECVET) aims to give people control over their individual learning experience and makes it more attractive to move between different countries and jobs. It facilitates the validation, recognition and accumulation of work-related skills and knowledge acquired during a stay in another country and experience in different situations. ECVET works for better compatibility between different VET systems across Europe and the qualifications they offer.

ECVET creates a technical framework to describe qualifications in terms of units of learning outcomes that are subjected to assessment, transfer, accumulation and recognition procedures. Each unit is associated with a certain number of ECVET points developed on common standards.

Individual's learning outcomes are assessed and validated in order to transfer credits from one qualifications system to another. The system allows development of common references for VET qualifications and is fully compatible with the European Credit Transfer System (ECTS).

EUROPASS

EUROPASS is an EU initiative that aims at increasing transparency of qualifications and mobility of citizens across Europe. It is a lifelong learning portfolio of documents describing all learning results, qualifications, work achievements, skills and competencies, acquired over time, along with appropriate certificates.

The portfolio consists of the following five documents that make skills and qualifications easily understood:

- **Curriculum Vitae** is freely accessible CV format that helps the EU citizens to present their skills and qualifications in the best possible way.
- **Language Passport** is a self-assessment tool for language skills and qualifications.
- **EUROPASS Mobility certificate** records the knowledge and skills acquired in European countries.
- **Certificate Supplement** describes the knowledge and skills acquired by holders of vocational education and training certificates.
- **Diploma Supplement** describes the knowledge and skills acquired by holders of higher education degrees.

The PureH2O programme in education advancement

The PureH2O project takes the following steps to qualifications recognition:

1. The PureH2O team establishes the management structure, distributes activities among partners and supporting organizations, and creates thematic and grade units and course subjects.
2. The ECVET based system for sectoral qualification description is constructed through creation of blended learning program in water supply sector, comprising 12 courses which knowledge part is organized in Learning Pathways (LPs) and Short Intensive Courses (SICs) designed to match EQF levels 5, 6 and 7, and weighed through ECVET.
3. The project participants implement pilot procedures for assessment and transfer of the learning outcomes in formal and non-formal education.
4. PureH2O Skill Passports will be provided for gathering of documents certifying completed training and acquired competence/qualification in water supply sector.

These steps are to be made using the following instruments:

1. A broad multilingual b-learning portal that hosts the PureH2O qualification e-scheme and the PureH2O Skill Passports, plus guidance, evaluation and dissemination materials.
2. Partnership with sectoral organizations established for integration of the ECVET system at national and European level.
3. PureH2O outcomes disseminated & use through open information and supporting resources.
4. Measures for post-project exploitation of the PureH2O e-scheme for qualifications description based on Learning Outcomes.
5. Links between the intended qualifications and qualifications required by the national training programmes using ECVET.

The PureH2O quality management

A set of quality indicators are applied to measure the progress in different phases. The quality management tools monitor the integrity, flexibility and efficiency of the project components, using procedures for control and assessment of the PureH2O outcomes.

Allocation of the ECVET credit points depends on the national requirements.

Formal learning contexts in different countries and situations are compared to determine learning time for competence acquisition in non-formal/informal manner.

Process quality indicators should observe:

- Relevance between content and objectives.
- Criteria for assessment and self-assessment of the work.
- Appraising the adequacy of the project communication and plans for operational phases.
- Evaluation of the project outcomes against the EU requirements.

PureH2O competence based VET model – the pillars

The didactic approach

Learning outcomes are organized in units according to the qualifications needed in a particular area of activity.

Materials need to be rearranged to accommodate the changing role of educators from *teachers* to *facilitators of learning.* Thus, the structure of the learning material needs new models of units' identification.

The PureH2O methodology is based on the definition of the content of a formal unit defined as a subject in the study curriculum. In the Learning Outcomes scheme, the unit represents a number of competencies required at completion of a study course.

In the context of an output–centered course description, a newly introduced unit has to cover knowledge and skills that are part of the daily work life. These practical competencies are incorporated into the Learning Outcome Scheme.

The training

The training is based on the need of up-to-date education in drinking water supply sector and covers new content in this respect. It is organized in units functioning through an e-platform. The process follows special training and qualifications description model published in 4 languages. The training supports the development of national and sectoral qualifications systems, using tools such as EUROPASS, ECVET and EQF.

The testing

The testing relies on cooperation work with representatives of target groups. It organizes approbation of the system for qualifications description and the mobility procedure for cross-organizational and multinational cooperation. The testing monitors the performance of

training events and creates a set of documents regarding the certification procedure. It reviews feedback for project products applicability and relevance and carries out final tuning of the outcomes.

New job opportunities

New job opportunities emerge due to the EU recognition of qualifications acquired by the trainees in drinking water supply sector, especially in relation to operation, management and economics of Drinking Water Treatment Plants. They are opened to nationals who embark on reintegration into the national economies after studying and working abroad. These job opportunities appear as a result of the cross-border mobility of trainers and employers due to the application of PureH2O model that offer scheme for transparency and better understanding of trainees' qualifications since PureH2O supports recognition of qualifications in drinking water supply sector in partner countries.

PureH2O impacts drinking water supply economic sector

EU policy

EU development policy promotes an integrated framework for drinking water resource management, applying a range of widely tested approaches to purified water and sanitation services. The EU water management policy has three priorities:

- Universal access to safe drinking water and adequate sanitation.
- Establishing and strengthening organizations and infrastructure for the sustainable and equitable management of water resources.
- Coordinating fair, sustainable and appropriate distribution of water between users.

Financial loss

Water loss and bad sanitation raise water supply services operating costs, and impede their improvement. Leaks and contamination complicate drinking water systems sustainable management.

Therefore, water loss from distribution systems and poor water sanitation deserves appropriate actions to reduce stress on scarce water resources through implementation of strategies and technologies to control leakage and contamination.

Environmental damage

Besides saving water and energy resources, drinking water loss reduction can diminish pollution to freshwater systems. Investment in water loss reduction improves customer satisfaction and redirects resources for management of more advanced sectors.

Problem solving

The growing problems in drinking water management needs more adequate human capacity that can be improved by training of urban water managers, decision makers and operators of water supply utilities that may learn from each other's experience.

The successful approach involves development of sound institutions and strong cooperation to apply the best solutions that are to be shared among the international community of practitioners and agencies that provide capacity in the area.

The drinking water supply sector lacks

- Best trained professionals and managers.
- Individuals with flexible qualifications and appropriate skills and competencies.
- Mutual recognition of qualifications acquired abroad and at international level.
- Transparency among the various national qualifications systems and Vocational Education and Training (VET) programmes.

The bottle neck to be addressed

Deficits are to be addressed by increasing the chances of professionals to meet internationally agreed qualification standards in drinking water supply by supporting knowledge gathering, assessing best practices and formulating needs for qualifications upgrade and understanding.

New policies in qualifications recognition are still to be applied at national level, but they must be preceded by analysis of state-of-the-art and economic conditions. Moreover, institutions and national and private educational and labor organizations need tools to facilitate the process of qualifications recognition.

Menu: Products

PureH2O elaborates innovative results:

Analysis of the training needs:

In brief: A set of national reports, including the description of drinking water supply sector and VET requirements in each partner country, collected through questionnaires and group work with representatives from the key project target groups and stakeholders. The expected milestone of the deliverable will be identification and analysis of the specific VET requirements in the project area. It will be used to:

- further develop the other PureH2O Intellectual Outputs;
- improve the development, exchange and maintenance of foreseen VET certificate;
- enhance the accessibility and transparency of acquired e-competences by harmonizing the EUROPASS, ESCO and other European instruments (EQF, ECVET).

In: English.

Available: as texts on the website; as a database.

Methodology: surveys, questionnaires, interviews, consultations.

e-Learning in PureH2O:

In brief: An interactive e-learning portal that serves as flexible e-medium providing competence-based carrier development. It also acts as knowledge data base, supplying relevant information in the project subject area, as well as experience exchange platform within and outside the project consortium. The PureH2O e-portal also operates as a powerful dissemination and exploitation tool. It consists from the following parts:

- General information about the project describing PureH2O aims, deliverables and impacts;
- PureH2O qualifications e-platform providing a frame for establishment of an algorithm for competence development in Drinking water supply sector;
- Project e-gallery representing collection of logically related records, consolidating relevant information into a common pool of data in the project target sector.

In: Turkish, Bulgarian, English, Dutch

Available: on the website

Methodology: e-learning; partners and target users have free online access to the web portal.

PureH2O learning outcomes based blended learning curriculum

In brief: Creation of blended learning programme in water supply sector, comprising 12 courses concerning characteristic, operation, management and economics of Drinking Water Treatment Plants. The project blend foresees development of on-/off-line training friendly opportunities designed for target groups in all partners' languages. The training model is elaborated on the basis of the specific requirements for targeted qualifications of professionals working in the water supply sector who need upgrading/updating of their knowledge and skills. Comprehensive learning outcomes-based units are designed to give detailed view of knowledge, skills and wider competence required for the target groups. A certification process based on ECVET allocation is set up. The knowledge is available as Learning Pathways (LPs) and Short Intensive Courses (SICs) designed to match EQF levels 5, 6 and 7, and weighed through ECVET. The qualification description is made in accordance with ISCO/ESCO system.

In: Turkish, Bulgarian, English, Dutch

Available: on the website.

Methodology: creation of 12 qualification descriptions at different EQF levels and corresponding blended learning LPs and SICs.

PureH2O Skills Passport

In brief: A general frame for gathering of documents certifying completed training and acquired competence/qualification in water supply sector. It facilitates the mobility process and comprises the following:

- Documents complying with EUROPASS and newly introduced DIGCOMP Framework;
- Work experiences or traineeships certificates;
- Non-formal education and training certificates (such as in-company training);
- Informal learning certificates (e.g. from job experiences, leisure activities or volunteer work);
- All other relevant internationally recognized certificates.

The system frame is set up following the established common for the project criteria and procedures, and standard quality indicators.

In: Turkish, Bulgarian, English, Dutch

Available: as documents on the website.

Methodology: a Skills Passport is constructed for each qualification description.

PureH2O analysis report of testing & evaluation

In brief: PureH2O project evaluation strategy involves internal and external monitoring and evaluation. Internal monitoring covers activities of partner organizations, internal evaluation of interim/final results by experts, and application of quality indicators. External monitoring applies external evaluation criteria organized by academic national and international structures.

The final evaluation of project results/outcomes is conducted through testing/evaluation and tuning process. As a result an evaluation report is delivered, which comprises:

- A set of documents regarding the evaluation/certification procedure;
- Information for the format and specific content for each event and summary for the type and specificity of target groups and stakeholders involved;
- Collected feedback information for project products applicability and relevance;
- Measures implemented for the final tuning of the planned outcomes.

In the evaluation report the relevant conclusions for the possibility for approbation of the system for qualifications' description – mobility procedure for cross-organizational / multinational cooperation is also made.

In: English

Available: on the web

Methodology: Evaluation methodology involves application of self-assessment strategies through questionnaires, tests and evaluation forms; creation and use of an algorithm for the training process, gathering of data by structured testing tools, and analysis of feedback information.

Supporting sharing events

In brief: Six trainings events are planned for piloting and exploitation of project results and products accompanied by a set of evaluation documents. Thus, testing the qualifications description in the context of specific VET qualification acquisition at all partner countries will be organized in a blended learning manner. The training events will be organized on voluntary principle and the process of training will be evaluated by self/assessment using the programme evaluation tools. Off-line tuition will be also implemented as a feedback for optimization of programme content and applicability.

In: Turkish, Bulgarian, English, Dutch

Available: in partners’ countries, at workspace, as oral presentations

Methodology: face-to face tutorials, on-/off-line testing,

PureH2O analysis report on dissemination and use

In brief: This output is focused on the dissemination objectives and measures achieving throughout the course of the project. It defines and prioritize the key objectives of the project's dissemination; identifies main stakeholder types/categories and why to reach them; elaborates means for reaching out to stakeholders, defines time-lines for the planned dissemination activities and stakeholder contact and, finally, identifies and prioritizes dissemination tools.

In this document an overview of the dissemination process is made, conclusions is drown how to identify and reach stakeholders, including end users and the public, in order to raise their awareness regarding the findings of the consortium and to encourage them to support and adoption of the consortium's recommendations regarding the access to the obtained research data. Analysis of applicability of dissemination tools is done, as well as assessment and mapping of tools to project activities and stakeholders groups. Final evaluation of PureH2O dissemination strategy is given.

In: Turkish, Bulgarian, English, Dutch

Available: as text document on the web site

Methodology: face-to-face data presentation; dissemination of advertising and information materials, feed-back results for project applicability and acceptance gathering and analysis

Dissemination & use workshops

In brief: multiplier events envisaged to diffuse developed project intellectual outputs to target audience and interested stakeholders through organization and performance of dedicated workshops. Depending on the country and institution specific features the envisaged dissemination & use workshops will be focused as follows:

- The Universities will operate on academic level and will target as well national authorities engaged with VET;
- The R & D centres will give emphasis on participants from research centers and scientific institutes;
- The SMEs will invite participants from the business, managerial staff as well as job-seekers.

In: Turkish, Bulgarian, English, Dutch

Available: in partners' countries

Methodology: launching of announcement company, gathering of data by pre-structured inquiries, and analysis of feedback information.

Booklet "PureH2O project: challenges & limitations"

In brief: This project output evaluates the achievements compared to the project objectives and seeks for successes and lessons learned of the PureH2O project. The following objectives are pursued in order to achieve this goal:

1. Assessment of the structure and level of VET in the Drinking water supply sector;
2. Conducting of document analysis on project activities and its quarterly reports and policy, and legal documents related with strengthening the VET in the area;
3. Defining the level of participation of the different project target audience; stakeholders; policy makers and wide public;
4. Stating the relations between project outputs, outcomes and effectiveness;
5. Developing of recommendations for further actions based on evaluation results and conclusions.

In: Turkish, Bulgarian, English, Dutch

Available: as text document on the web site

Methodology: review analysis of the PureH2O project trough qualitative (individual interviews, observations), documentary (project documents, reports, standards) and quantitative study methods based on project goal, objectives and indicators.

Menu: Partners

PureH2O consortium

The PureH2O project consortium unifies **six partners** from three European countries – Bulgaria, the Netherlands and Turkey, including two companies, a research organization (R&D), and three universities.

Its structure follows hierarchic principles, governed by the Project Management Board (PMB), leaded by a Project Coordinator. The Board includes the contact persons of each partner and is responsible for the performance of the project operational phases. The National Partner Offices (NPOs) are responsible for coordination and performance of the project work at local basis. The dissemination and use activities are assigned to Project Dissemination and Use Group (PDUG) and project quality management - to Quality Management Unit (QMU).

The structure of the consortium relies on main players and facilitators from the supporting network. The main players are responsible for wide spreading and optimization of the project outcomes at national and international level. As representatives of decision makers, VET professionals, and social partners, the supporting network participants facilitate the project performance. The main project consortium consists of members with different background and long term **experience** in various national and European programmes – LdV, Socrates, 6FP and 7FP, NATO and others. Partners have the necessary capacity, experience and competence, and on the basis of their competence the project activities are distributed.

The consortium infrastructure and connections with formal/non-formal education sector ensure direct contact with the target audience. The contacts with SMEs from the same sector help for product testing and feedback analysis.

Orkon International Engineering Training Consulting Co. Inc., Turkey

Orkon is an international engineering, training, consulting and project design organisation in Turkey. It works in infrastructure, water, environmental and transportation projects and design the environmental & water projects to Ministry of Hydraulics and roads projects to General Directorate of Highways, in Turkey and abroad. In the scope of water and environmental projects, it is experienced in the design of water and waste water networks, water distribution lines, sewage collectors, drinking water and waste water treatment plants, storm and drainage projects. In the scope of transportation projects, it is experienced in the design of roads, highway designs, bridge, viaducts, culverts, tunnels & intersection projects. It uses its

experience in this field to European Union projects. Orkon knows that taking part in LLP is a great investment for the future educational development; therefore Orkon puts forth a great effort in providing a high quality service throughout partnership, transfer & development of innovation projects. It will use its experience also in this PureH2O project by using its knowhow in the environmental, water, irrigation and drainage field. Orkon has 20 experienced staff working in the company, mostly engineers with high qualified competences.

Niğde University, Turkey

Niğde University (NU) provides higher education to 20 000 students. It was an active member of Lifelong Learning Programme (LLP) and continues its activities within ERASMUS + actions. In accordance with its mission of becoming an international university, NU has entered into collaboration agreements with foreign institutions to promote the enrichment of teaching and research programs. NU Engineering Faculty has experience in terms of many different engineering areas. NU Environmental Engineering Department (EED) was founded in 1999 under the Engineering Faculty of NU and started its educational activities in 1999 by offering M.Sc. degrees in "Environmental Engineering". Undergraduate program has been initiated in Fall, 2009. The department currently houses two divisions: "Environmental Sciences" and "Environmental Technology" and a robust faculty with young, dynamic, innovative, and highly qualified academics. On the other hand, Environmental Engineering Department performed many international (EU) and national (TUBITAK, NU SRPU) projects.

Gazi University, Turkey

Gazi University is one of the few universities whose history dates back to 1920s in Turkey with faculties from education to communication, from fine arts to engineering, sports to forestry, medicine to pharmacy, dentistry to science as well as economics to technology. Gazi University educational facilities are spread out in five different campuses. With 80,000 students and more than 7,000 staff (academic, technical and administrative) the university is on par with the world average in terms of the number of students per instructor. GU is very decisive and ambitious in fulfilling the requirements of the Bologna Process to which Turkey became a party to in 2001. The university started a bilateral cooperation for students and academic staff mobility immediately after receiving Erasmus University Charter in 2004. In 2005, GAZI University became active member of the European Universities Association

(EUA).

PLANART, Turkey

PLANART is a 16 years old company working on environmental projects, and planning and urban design. Regional and master planning in every scale, coastal zone management planning, multi hazard risk mitigation planning are all implemented by PLANART. In addition to its planning works, another group of experts in the company composed of experienced engineers are focused on environmental protection issues. Planners and environmental experts work together combining their views in a holistic way, which makes the company distinguishable compared to other similar companies. Environmental department have several projects on coastal management, natural and cultural resource management and environmental impact studies. Consultancy services on site selection studies (mostly for water and wastewater treatment plants, sanitary landfills), policy and strategy development, project development and management are given by the company. Company's staff and directors have 30 years experience in collaboration and consultancy with local authorities on environmental friendly (ecoplanning) planning studies concerning the protection of natural resources including water resources. PLANART has very experienced staff working in the company, mostly engineers with high qualified competences.

R&D Center "Biiointech" Ltd., Bulgaria

Research and Development Center “Biointech” Ltd. (R & D “Biointech”) is founded in accordance with European strategic goal to increase the role of R & D in introducing new knowledge into education and technological innovations. It promotes research and development in the area of consumer and environmental friendly technologies, information and communication technologies by bringing together experts in that field from Bulgarian and European Universities, research organizations, industry and decision policy making institutions. R & D “Biointech” possesses expertise in the field of production, application and economic planning in the field of Green Biotechnology and especially Green Energy and Bioeconomics. The team of R&D Center “Biointech” involve experienced educators and trainers. The participants are members from all levels of education. They are experienced educators in textbook writing, quality assurance issues, curriculum development, new training techniques as well as provision of trainings in VET with adults and youth. Training is one of our main lines, which is aimed at both active adults and unemployed, in order to allow them to adapt to a constantly changing work environment within a society and a market

increasingly competitive. R&D Center “Biointech” is targeting in adaptation of adults and young people to the transformations of educational, technological and physical environment through improvement of their communicational and social skills, exchange of experience and knowhow of good practice in national and international level. It also can offer to the project partnership own staff expertise and competence in governing as contractor/coordinator/expert of multinational projects under different EU initiatives – TEMPUS, INCO-Copernicus, 5FP, NATO, Socrates/Erasmus, LdV I and LdV II programmes, ERASMUS+.

Open University of the Netherlands, Heerlen Netherlands

OPEN UNIVERSITY OF THE NETHERLANDS (OUNL) is the internationally recognised Top No.1 Dutch University for Online Learning, Welten Institute is one of the biggest European & international research institutes in : technology-enhanced learning (TEL) ; effective, efficient & enjoyable learning (FEEEL); as well as teaching & teacher professionalization (TTP). ONUL is responsible for the testing and evaluation of project deliverables as well as profile identification of groups for testing in each country and target institution. Prof. (KR) Christian M. Stracke coordinated and supervised many research projects on quality and evaluation in e-Learning funded by the EC (amongst them: ARISTOTELE, AGRICOM, WACOM, eCOTOOL, VOA3R, COMPAT, SIMBASE, OERTest, OPAL, CEN eLearning Quality, TRIANGLE, EQO, eACCESS).

Menu: Valorisation

The PureH2O scheme heads for directions, such as:

– *Target groups*

The PureH2O qualification recognition model is targeted at teachers, trainers, learning facilitators, guidance professionals, school/institution managers and political decision makers are the selected subjects of fit these requirements.

– *Economic sectors*

Chemical and eco-engineering, environmental protection, biotechnology, healthcare, food industry need professionals with relevant and updated qualifications approved following the PureH2O path.

– *Institutional cooperation*

The PureH2O partnership between various institutions and national authorities contributes to the process of regulation, transparency and recognition of qualifications at national and European level.

Benefits from PureH2O measures

Target groups benefit from:

- Intensive support for their motivation for learning.
- Implementation of national good practices for qualification assessment.
- ECVET based system for sectoral qualifications description and multilingual *e*-portal.
- *e*-Scheme for PureH2O Skill Passports and instructions on practicalities.
- PureH2O training programme based on online and offline learning methods.
- Set of Learning Outcomes with training units.
- Learning Pathways and Short Intensive Courses.
- ECVET evaluation plan awarding credit points.
- Exemplary documents.

Target sectors benefit from:

- Sectoral network and organization of 6 workshops.
- Validation of PureH2O products and organization of 6 testing events at sectoral level.

- Embedding of project results in related sectors.
- Multilingual dissemination materials: booklets, leaflets; posters; website information, and others.

Regional development benefits from:

- Standardized user-centered VET learning paths.
- Qualifications descriptions in the field of PureH2O to be introduced into the educational and industrial sectors in Bulgaria, the Netherlands and Turkey.
- Globally accessible PureH2O *e*-portal.
- Tests and certificates offered to trainees from Bulgaria, the Netherlands and Turkey.
- PureH2O national workshops for presentation of project outcomes.
- International workshops with participation of broader audience.
- Cluster activity with similar initiative for further application of the PureH2O model.
- Introduction of numerous EU initiatives, such as ERASMUS +; South-East Europe, Seventh Framework Programme, and others.

Post-Project Life

The sustainable impact of the project results is expected to be reached through dissemination and use activities. Partners undertake some specific targets-oriented work focused on target groups, economic sectors and institutions.

Sustainability is ensured by:

- Maintenance of the project consortium during post-project life by self-funding and national support.
- Support the web panel and its refreshment.
- Implementation of the project products and results into national educational systems at formal and non-formal educational settings.
- Network formation and dissemination & use events: pilot training, workshops, presentations about the project learning material with information about mapping VET.
- Development of new learning pathways, with transferable learning outcomes.
- Building of clusters with relevant projects for prolongation of PureH2O project life.