

# CLUVEX AND UNAVEX VIRTUAL EXCHANGES AS A TOOL FOR EDUCATION OF YOUNG GENERATION

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## INTRODUCTION

Traditional concept of on-site education is changing. Alongside traditional teaching, distance education is increasingly becoming available. Virtual Exchange (VE) is a tool with which students' interest in distance education can be increased and the element of interaction can be added (*O'Dowd & O'Rourke 2019; O'Dowd 2021; Schenker 2013*). UHel is currently coordinating two European Union ERASMUS+ VE projects. The Climate University for Virtual Exchanges (CLUVEX, 2023-2026; [www.atm.helsinki.fi/cluvex](http://www.atm.helsinki.fi/cluvex)) and The UnaEuropa for Virtual Exchanges (UnaVEx, 2024-2027; [www.atm.helsinki.fi/unavex](http://www.atm.helsinki.fi/unavex)) project are currently implemented during 2023-2026 (*Lappalainen et al., 2025*). The projects focus on the challenges of climate change and sustainable development. The goal of these projects is to bring a total up to 5000 university students to VEs within three years. The projects support the continuation of studies in the subject area through existing MOOCs. The CLUVEX project is based on the Climate University (CU, [climateuniversity.fi](http://climateuniversity.fi)) MOOCs, developed and coordinated by UHel while the UnaVEx project is based on sustainable development MOOC of the UnaEuropa network ([www.una-europa.eu](http://www.una-europa.eu)). UHel together with the projects' partners from Europe, Europe Neighbourhood East (e.g., Ukraine, Armenia), and Africa (e.g., South Africa, Republic of Congo, and Kenya) are developing and researching the VE concept as a part of distance learning.

## MATERIALS AND METHODS

During VEs, university students from different countries receive science, based information related to the Sustainable Development Goals themes e.g. climate change, sustainable development and exchange ideas in small groups working online (in virtual environment). The focus of the virtual exchange is on collaborative group work, which is primarily based on discussions and the exchange of experiences. The discussions are supported by lectures and background materials. After VE, the students will submit reports for the 1 credit point granted by UHel and VE Certificate given by the projects (in CLUVEX – so-called the Climate Messenger certificate, and in UnaVEx – so-called the Climate Advocate certificate). Both projects collect necessary information on students' motivations before the start of each VE and feedback after VE completed.

## RESULTS

In CLUVEX, since beginning of the project in July 2023, the VE concept was developed, guidebooks such as VE Guidebook, Climate Literacy Guidebook, Climate Messenger Code of Conduct, and other supporting educational materials were elaborated. In May and Sep of 2024, a series of 5 trainings (TR) for moderators was successfully carried out about the (i) CLUVEX concept and technical skills, (ii) Climate University MOOCs, (iii) Soft skills, (iv) CLUVEX guidebooks and materials, and (v) Climate Horizon exercise, based on climate utopia pedagogy, and web-based tools for climate-related data visualisation, analysis, and interpretation. The [1st CLUVEX VE Week](#) took place online during 14-18 Oct 2024. The [2nd VE Week](#) took place online during 12-16 May 2025. The [3rd VE Week](#) will take place during 6-10 October 2025; the 4th and the 5th VE Weeks will take place in 23-27 Feb 2026 and 20-24 Apr 2026. It should be noted that starting preparation for the 2<sup>nd</sup> VE the 3 online trainings (so-called the Moderators-Get-Together) presentations about basics and improving of VE concept, programme, technical skills to work with education, communication, and collaboration platforms (DigiCampus, Zoom, and Miro-board, respectively), individual and collaborative Climate Horizon exercises, as well as questions vs. answers. The materials from other trainings are available in the DigiCampus area for registered moderators for self-learning and practicing before the start of VE Week. The VE Weeks are actively advertised and promoted through participating in the project Universities, as well as their collaborators, students' local and international various networks, etc. Students successfully completed the VE Week, in addition to 1 ECTS credit and certificate, obtained an opportunity to attend free of charge the CU MOOCs related to climate change themes.

**In UnaVEx**, since beginning of the project in February 2024, the preparatory work towards VEs, guidebooks and educational materials, training of moderators, and piloting VE Week for students were elaborated. The 1<sup>st</sup> VE Week for students took place online during selected 5 days of February-March 2025 (starting on 24 February and ending on 28 March). It was preceded by 5 online trainings for moderators which included lectures, tools, guidebooks, materials, and individual and collaborative Sustainable Action exercise, based on “Introduction to Sustainability” course. During VE Week the same e-tools as in CLUVEX – DigiCampus, Miro-board, and Zoom – were actively utilised by moderators and students listening plenary talks, working online in groups on individual and collective exercises. The 2<sup>nd</sup> VE Week is scheduled for 5 selected days (starting on 13 November and ending on 11 December) in November-December 2025.

## SUMMARY

In these two ongoing CLUVEX and UnaVEx projects, ground-breaking work is done to develop and implement on practice the VE concept.

The benefits for moderators who attended and participated in trainings and VE Weeks include: (1) internship certificate related to studies; (2) up to 3 ECTS credits; (3) possibility to attend online the Climate University and the UnaEuropa selected courses; (4) hone online interaction, pedagogy and language skills in international environment; and (5) increase contacts with the projects’ universities and contacts.

The obtained skills and learning outcomes by students during VE Weeks include: (1) Basics of the atmosphere, biosphere, hydrosphere and anthroposphere interaction and feedbacks; (2) Basics of climate change based on latest science: Planetary boundaries concept, Last methodological tools used in observing the Earth System; (3) Understanding of the human role from different perspectives like ethical, social, different cultural backgrounds in climate change, adaptation, and mitigation advances; (4) Critically reflect owns views on climate change, sustainability, and create new visions; (5) Reflect different international and intercultural perspectives on climate change and sustainability; (6) Reflect about global versus local challenges in finding adaptation and mitigation solutions; (7) Work together in different online working environments; (8) Work and be part of an international teams and manage small joint projects; (9) Communicate and present their work in English; (10) Learning basic study skills such as use of open data, literature search, critical reading and thinking.

During VE Weeks in both projects, the pre-questionnaire and feedback forms for moderators and students were arranged and answers/data collected for a science-based analysis of the developed VE concept and pedagogical approach with a goal to publish as a series of peer-reviewed papers.

The results of the VE development work, elaboration of educational materials for students, education of moderators, and achieved steps in arranging and carrying out the VEs (as VE Weeks) for students are presented.

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