

SOFT-SKILLS DEVELOPMENT FOR VE LEARNING: EXPERIENCE OF THE CLUVEX PROJECT ERASMUS+ PROGRAMME

**Olga SHEVCHENKO¹, Sergiy SNIZHKO¹, Sergii ZAPOTOTSKYI¹,
Andrii GOZHYK¹, Alexander MAHURA², Hanna K. LAPPALAINEN²**

¹Taras Shevchenko National University of Kyiv, Kyiv, Ukraine

*²University of Helsinki, Institute for Atmospheric and Earth System
Research (UH-INAR), Helsinki, Finland
shevchenko_olga@knu.ua*

Summary. *Virtual exchange (VE) is a modern pedagogical approach which promotes interaction and collaboration between students separated by distance or cultural differences. Although the role of VE is expected to grow in the future, there are certain risks associated with student motivation and engagement in fully virtual learning environments. The CLUVEX (Climate University for Virtual Exchange) project (July 1, 2023 – June 30, 2026) is funded by the European Commission (Erasmus+ program). The project focuses on thematic areas such as climate change, climate action, environmental protection, and green skills, and aims to develop climate competencies among university students at the bachelor's, master's, doctoral, and postdoctoral levels. The CLUVEX project aims to organize five Virtual Exchange Weeks for students. An important part of the CLUVEX initiative is the training of moderators and the development of soft skills that promote interactive learning, student engagement, and knowledge sharing in a VE environment. This thesis presents the CLUVEX project's experience in developing soft skills for virtual exchange learning.*

Keywords: *Virtual Exchange, Climate University for Virtual Exchange (CLUVEX), Soft-Skills, Climate Change, Virtual Exchange Week.*

Virtual Exchange (VE) is a pedagogical method that facilitates interaction and collaboration among students separated by distance or cultural differences. This method enables enriching cross-cultural conversations and teamwork. Well-trained moderators play the key role in VEs.

The rapid expansion of Virtual Exchange and remote teaching was significantly driven by the global COVID-19 pandemic, which positioned VE as the only viable alternative for education. While VE is expected to play an increasingly important role in the future, this has led to concerns about student motivation and engagement in fully virtual learning environments. To maximize the benefits of VE and address potential challenges, educational programs must be carefully structured to ensure effective guidance, accessibility, scientific accuracy, and international collaboration while minimizing barriers such as technological limitations, language difficulties, and low participation rates.

The CLUVEX (Climate University for Virtual Exchange) project is a three-year initiative (1 July 2023 – 30 June 2026), funded by the European Commission (Erasmus+ program) and coordinated by the University of Helsinki (Finland) in partnership with institutions from Denmark (University of Copenhagen), Ukraine (Taras Shevchenko National University of Kyiv and Odessa I.I. Mechnikov National University), Armenia (Yerevan State University), and Finland (BioArt Society). The project focuses on thematic areas such as climate change, climate action, environmental protection, and green skills, aiming to develop climate competencies

among university students at the bachelor's, master's, PhD, and postdoctoral levels. Additionally, CLUVEX explores innovative approaches to distance education and enhances VE methodologies to keep students engaged and motivated in MOOCs.

The CLUVEX project aims to organize five Virtual Exchange Weeks for students. A crucial part of the CLUVEX initiative is training moderators and developing soft skills, which facilitate interactive learning, student engagement, and knowledge exchange within VE settings. Moderators should be trained to make their assistance to students as useful as possible.

Before the Second Virtual Exchange Week, an approach to training moderators for the Virtual Exchange Week was selected and tested. For 2nd VE Week (May 2025), we organized 3×1.5 h Moderators-Get-Together trainings (meetings on Zoom) and moderators were offered materials for familiarization at DigiCampus and the CLUVEX website. During these trainings, information about the CLUVEX VE concept, the programme of VE Week for students, aspects of registration in the DigiCampus area for moderators, introduction to the Climate Horizon group exercise with demonstration of web-based tools for climate-related data visualization, analysis and interpretation; using Miro-board and work in breakout-zoom-rooms; answering questions from the moderators was provided/refreshed. This approach was also applied before the third VE Week (6–10 Oct 2025) and will be applied before the fourth and fifth VE Weeks (23–27 Feb 2026; 20–24 Apr 2026).

In preparation for moderators to conduct a VE week, an important part is their self-preparation and work with the materials uploaded on the DigiCampus platform. After registration, moderators have access to the Moderator DigiCampus platform (<https://digicampus.fi>). On the platform, moderators have access to many useful things.

Moderators DigiCampus content: general Information (registration, general instructions for moderating VE, and VE Week information); trainings materials (in this session are upload all five (TR#1,2,3,4,5) sessions, in different folders, with video-recordings and slides delivered during each session); material for Virtual Exchange Week (Virtual Exchange Guidebook, Climate Literacy Guidebook, Climate Messenger Code of Conduct).

Before the Virtual Exchange Week, moderators should self-study materials from the Moderator DigiCampus platform: moderator training materials; material for the Virtual Exchange Week and listen Virtual Exchange Week lectures.

The following materials should be studied especially carefully: VEG – “Virtual Exchange Guidebook”; CLG – “Climate Literacy Guidebook”; CMC – “Climate Messenger Code of Conduct”.

The *Virtual Exchange Guidebook (VEG)* is an e-living document that uses CLUVEX, as a reference for lessons learnt during the planning and execution of VEs. As it is a living document, the content will be modified and updated according to the experiences of experts, moderators, and students participating in CLUVEX VEs weeks, at least, during the CLUVEX project lifetime.

The VEG contains a summary of the advantages and challenges of virtual exchange; a reference for the lessons-learnt on VEs of the CLUVEX project; the specific CLUVEX aims and indicators for achievement as a reference; key considerations for planning VE; CLUVEX implementation plan and lessons learnt

The document also contains a potential list of learning outcomes and obtained skills for the CLUVEX VE Weeks, which can be further refined and updated in the future.

VEG describes tentative content of virtual exchange week; contains educative material for VE; setting up principles, criteria and procedure of students' selection for VE; describe how to integrate of the credits into curricula at the participating universities; contains some technical e-setups, principles of selecting approaches and technical tools to overcome language barriers; describe evaluation, assessment, studying and developing the VE concept; principles of organization of the Call-for-Moderators and Education of moderators and gathering feedback from the participated moderators and students. To learn more about VEG, please follow the link: https://www.atm.helsinki.fi/cluvex/wp-content/uploads/2025/02/CLUVEX_VEGguidebook_ver3.pdf

The "*Climate Literacy Guidebook (CLG)*" is reading materials for students participating in the CLUVEX Virtual Exchange Week – serves as a primer on climate literacy – a critical 21st-century skill set for future employment. It is intended as a resource for students participating in the Climate-University-for-Virtual Exchange (CLUVEX) VE Weeks. This guide introduces foundational concepts of the climate system and its components, as well as essential knowledge in climate research, communication, and the competencies and skills requisite for future careers.

The CLG consists of four parts and appendices. The first part of the CLG describes the Virtual Exchange Week program, VE Lectures on climate-relevant topics, VE Tools for climate-related data visualization and analysis, VE Group Exercise – Climate Horizons, and VE Week questionnaires. The second part contains materials from eight lectures that students will listen to during the virtual exchange week. Data visualization tools are described in Part 3. The last part of the CLG contains climate change-related concepts and terminology. Recommended reading, description of the Climate University online courses, learning outcomes, and environmental data visualization tools and database contained in the annexes of the CLG. To learn more about CLG, please follow the link: https://www.atm.helsinki.fi/cluvex/wp-content/uploads/2025/06/CLUVEX_CLGguidebook_ver3.pdf.

Climate Messenger Code of Conduct (CMC). This document is the Climate Messenger Code of Conduct (CMC) for participants of the VE Weeks. It summarizes the code of conduct during the VE week and beyond CLUVEX with newly acquired climate competencies. The document contains CLUVEX Climate Messenger's educational materials and exercises, instructions for the interaction and communication during the VE Week, instructions for unexpected situations during the VE Week, Code of Conduct after CLUVEX as Climate Messengers. To learn more about CMC, please follow the link: https://www.atm.helsinki.fi/cluvex/wp-content/uploads/2025/06/CLUVEX_Del_2.3_CMC_ver2.pdf.

The *Climate Horizon exercise* is a key activity for students during the Virtual Exchange Week. Climate Horizon concept: during the VE Week, students will imagine and construct a Climate Horizon that describes a hopeful state of the future from a climate change perspective. For this task, students will need to utilize and apply what

they will learn from the lectures, tool tutorials, and their small group online discussions. They need to stay active and take notes throughout the entire week.

Personal Climate Horizon (Monday–Thursday): During the VE Week, students examine their own living environments and imaginatively map their present, past, and possible future. Throughout the VE Week, students will draft their own Climate Horizon using the lectures, tools, exercises, and group discussions as their reference and inspiration. On Friday, students will present their own personal/individual Climate Horizon to their group members (max 5 min per presentation). After the VE Week ended, maximum during 1 week, students should prepare a short report (max size of 2 pages, in MS Word or PDF format) to be submitted to the folder on the DigiCampus course page.

The purpose of the Climate Horizon exercise is to look at climate change from different perspectives, share thoughts and different perspectives with other students from different backgrounds, and collectively think of a better future vision. The individual Climate Horizon is created piece-by-piece every day during the VE Week until Friday.

Collaborative Climate Horizon (Friday): students should share their Personal Climate Horizons with their group members. They should try to think about what their Climate Horizons have in common or how they differ from one another. Students can discuss, for example, these questions: What view of good life underlies these suggestions? What ideas, changes in contexts/institutions etc, are needed to implement these? Include a summary/conclusion of their Collaborative Climate Horizon on the Miro board – the moderator can take the lead in finalizing the group assignment.

The goal of the group exercise is not to agree on one particular horizon, but to demonstrate the variety of ideas and perspectives that there can be to Climate Horizons, including possible conflicting ideas.

With the support of the lectures, tools, and moderator, the primary focus of students' teamwork during VE week will be to design both their individual and collective Climate Horizon. This involves mapping and discussing the Present (current climate change), the Past (causes of climate change), and the Future (climate scenarios) from their unique perspective, considering their own environment and situation. This process will be facilitated using the online whiteboard Miro platform. Throughout the week, students will document the most interesting and important things concerning Climate Horizon on the online whiteboard Miro. On the last day of the VE Week, each student's group will work together to design their Team's Climate Horizon and contribute it to the Common Horizon during the joint session with 500 students. The group moderator will lead the finalization of this group assignment on your Miro board.

What do moderators need to remember about soft skills? The most important task of a moderator is to facilitate an equal and respectful conversation atmosphere.

- It is important to try to involve all group members in participating in discussions;
- In the beginning, a moderator will have time to get to know one another more informally;

- The organizers will provide to moderator assisting questions and other instructions for each day to structure and support the discussion and workshopping the exercise;

- Encourage using different communication aids, such as the chat feature, translators and Miro board.

Not only moderators but also two hosts are involved in working with students during each VE week. Training for hosts will be organized every time before the Virtual Exchange Week. It is important that the hosts have a good knowledge of the program of the Virtual Exchange Week, the Climate Horizon process, as well as important points related to hosting during the Virtual Exchange Week.

Role of the host(s): welcome everyone, introducing themselves; introducing speakers, keeping time, creating an engaging and caring atmosphere, introducing the breakout rooms, introducing the feedback form, and Daily polls.

The Training program for hosts includes: role of the host(s), Climate Horizon process, CLUVEX weekly program, tips for practical organization, atmosphere, and Daily polls.

To make the Virtual Exchange Week more interesting and to switch off students between activities, hosts should organize daily polls. Hosts can prepare interesting questions about climate and climate change, the environmental problems, green technologies, expectations from the CLUVEX Virtual Exchange Week, etc.

Solving the problem of student engagement during VE is closely linked to the training of moderators who work with students during VE, as well as to the successful development of soft skills. This publication presents the experience of the CLUVEX project in developing soft skills for virtual exchange learning, which can be used in other similar projects or become the basis for the development and improvement of relevant methodology in pedagogy.

Acknowledgement. The authors acknowledge co-funding by the Erasmus+ programme of the European Union, and are thankful to the contributions of all the CLUVEX Partners/Teams.