# Upskilling Remote Educators and Workers: Considerations on a European Certification Scheme

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**Purpose:** The past decades have been marked by significant changes in teaching, learning, and working. Technological advancements, economic crises, unexpected events such as the COVID-19 pandemic, and the increasing popularity of online education are only a few factors that led to the increasing preference for remote work and education. This generated the need for upskilling educators, remote workers, and managers, as working and teaching in remote and hybrid contexts requires numerous skills from diverse fields, which significantly differ from the skills specific to the profession. In this context, developing a certification scheme for remote educators, workers, and managers represents a pertinent need.

**Study design/methodology/approach:** This paper comprises the scientific process of identifying the skill gap of remote educators, workers, and managers, followed by the methodological aspects of developing the training programme. Furthermore, the article presents the results of the training programme, followed by a consideration of the importance of certification as the final achievement of the training programme.

**Findings:** The proposed methodology enabled the conception of a comprehensive and well-adapted set of courses, each designed to respect the particularities of the trainees' profile (learner persona).

**Originality/value:** The programme is part of the EU co-funded project VirtualEDU ("Upskilling and certification scheme for virtual educators", project number 2022-1-RO01-KA220-HED-000086331).

## Remote education and work – brief overview

### Introduction

The prolific evolution of Information and Communication Technology (ICT) created the context for driving change in the organisation of workplaces and the means for knowledge management and communication. Thus, remote workplaces gained unprecedented popularity, especially since the COVID-19 pandemic occurred. Remote work has significant benefits such as increased work productivity, reduced operational costs, higher flexibility of employees and reduced employee absenteeism (Pokojski et al., 2022). The problem is complex, and the disadvantages need improved visibility. Distorted work-life balance, high reliance on technology, data security concerns, and challenging supervision and monitoring of tasks are some of the most prominent disadvantages of remote work (Pokojski et al., 2022). One of the most significant challenges in remote work is the need for more skills to set up the workplace and those required for good performance while working remotely. A similar situation holds for educators who teach online courses or manage remote educational programs.

In the past decade, the core IT sector in Europe – comprising services such as IT consulting, computer programming and related services – has witnessed the fastest growth in terms of employment, rising from 1.2% in 2011 to 2.4% in 2023 (Eurofound, 2024). The pandemic and post-pandemic periods accelerated the employment growth rate in the IT core sector, particularly for smaller EU member states (Eurofound, 2024). The discussion about employment is relevant in remote work due to the rising number of remote workers operating in sectors such as IT. The prospects of further growth in such sectors, combined with the rising preference for remote work, justify the preoccupation with studying remote workers' impact, implications, and training needs.

Starting from the critical challenge of workers', managers', and educators' lack of the skills for working and educating in remote and hybrid contexts, the paper presents a European-funded project entitled VirtualEDU ("Upskilling and certification scheme for virtual educators", an Erasmus+ KA220-HED - Cooperation Partnerships in Higher Education project, number 2022-1-RO01-KA220-HED-000086331). VirtualEDU aims to develop the skills lacking in remote educators, managers, and workers through a training programme and to conceive a certification scheme for the training programme. This certification scheme creates the framework for lifelong learning programmes dedicated to remote education and remote work, generally considered the "future" of education and white-collar work in developed countries.

### *Remote educators*

Like the intensively popularised remote work, remote education also witnessed intensified implementation during the pandemic (Alles, Mudiyanselage, 2024). The deployment of modern communication technologies, primarily based on Internet use, digitalisation of learning contents, and the delicate balance between technology use and student involvement are major contributors to the discussion on the adequacy of remote educators for different study levels (Alles, Mudiyanselage, 2024; Marchisio et al., 2024).

One aspect of remote education refers to the pedagogical requirements for teaching remotely. Innovative pedagogies must be applied because students need to be engaged and motivated during the educational process. For example, Robescu et al. debate the requirements for applying innovative pedagogies such as pedagogy and pedagogy for teaching remotely to higher education students in engineering (Robescu et al., 2023). Macedo et al. present another interesting pedagogical approach for higher education students with a technical background (engineering) consisting of a combination of methods to enhance the development of soft skills: project-based learning, role play and problem-based learning (Macedo et al., 2024). Another good example of a remote education approach is presented by Rahman et al., who study the application of game-based learning in a metaverse for students in chemistry (Rahman et al., 2024). Massive Online Open Courses, MOOCs, have been deployed in the past decade, but they proved extremely useful during the pandemic (Geryk, 2024). Therefore, many tools and methods apply to remote education for its successful deployment (Ke et al., 2024).

Public policies, students' preferences as beneficiaries of educational services, and educators' readiness for remote teaching are factors that may enable or threaten the implementation of online, remote, or hybrid educational programmes. The pandemic period accelerated the digitalisation process in universities and enabled fast adaptation to the requirements of online education. However, the lack of training and limited technology access created major concerns and generated major discomfort for teachers and students alike (Binotto, 2024).

*Remote managers and workers*

While workers operating in fully remote settings generally have the organisational and technical support to complete their tasks well, employees working in hybrid settings (alternating remote and physical presence at the workplace) encounter more challenges with their professional performance based on limited support and specific knowledge (Mi, Ge, 2024; Zolotina et al., 2023).

Hybrid work has specific challenges for managers, too. They lack the knowledge and skills to efficiently create a culture of trust, which enables communicating and sharing information with their teams and enabling and facilitating interpersonal relationships (Eurofound, 2023; Maharani, 2024). Despite the need for flexibility in managing remote teams, managers must also find optimal solutions for monitoring and supervising task completion and employee performance (Eurofound, 2024). Further, remote managers support their team members in maintaining and implementing work-life balance initiatives (Eurofound, 2023).

**Methodology**

This section provides an overview of the Erasmus+ project VirtualEDU, which aims to address the issue of limited skills in education, work, and management in remote arrangements.

*Project objectives*

The project was designed starting from Key Action 2; Strategic Partnerships for Higher Education Institutions (HEI) (KA220) were adopted in accordance with the Erasmus+ 2022 guidelines. The European priority addressed through the VirtualEDU project was "Addressing digital transformation through the development of digital readiness, resilience and capacity". The project's main objective is to set up a certification scheme that would upskill remote educators, managers, and workers. The specific objectives derived from the main objective are the following:

- Collecting best practices of remote education and work and preparing reference process models
- Designing innovative training methods tailored for remote educators, workers, managers and support staff
- Implementing training materials and delivering them using online tools (such as learning management systems and MOOC platforms)
- Testing and verification of the efficiency of the learning methods, materials and innovative online/mobile learning platform
- Designing an accreditation and certification scheme for remote educators.

The project consortium consists of three higher education institutions (West University of Timisoara, Romania, Politehnica University of Timisoara, Romania, and University of Rijeka, Croatia), two companies (BICERO, Slovenia and Denkstatt Romania), and the European Certification and Qualification Association. Each partner brought specific expertise, knowledge, and capacity to implement the certification scheme inside their organisations.

Also, the diverse experience of each consortium partner enables building a common ground for the diverse perspectives of educators, workers and managers operating remotely.

The target groups of the project are adult lifelong learners from EU countries (18-65y), specifically:

1. Employees of higher education institutions: teachers, professors, teaching apprentices (target group for 'remote educator' training programme and certification)

2. Managers and team coordinators (target group for 'remote manager' training programme and certification)
3. Students and employees with remote jobs (target group for 'remote worker' training programme and certification)
4. Companies providing learning services, such as lifelong learning centres, contractual educators, non-formal learning institutions and other organisations and companies (target group for 'remote-work friendly organisation' certification).

### *Innovative aspects and added value*

Despite the wide array of existing courses for training educators and managers to perform in remote contexts, the majority of the remote education manuals, courses, and instructions currently available are incomplete and poorly organised.

The VirtualEDU project aims to cover every facet of education, work, and management related to remote arrangements. This includes organisational, psychological, physical, and health aspects. Another differentiator is the certification scheme, which ensures official recognition of the training program at the European level. Focusing on creating a certifying body that will act as the educational institutions' one-stop shop for all things related to remote work represents a key innovation.

Next up on the list of innovative aspects is the planned training format. Peer learning mechanisms, microlearning, social media-based learning, meme-based learning, and gamified web and mobile learning will all be included in the training. This will boost learners' motivation to complete the course and earn certification and help to prevent dropouts from the training programme.

Another creative feature is the target group that will be addressed. Professions related to information and technology (such as programming, freelancing, creative industries, translating, etc.) were typically regarded as remote-friendly. Many other education-related professions, such as teachers in elementary, secondary, and university schools and educators at private training facilities, were forced to work remotely due to the recent pandemic. The project beneficiaries (trainees) comprise those target groups.

Finally, no EU-wide initiative offers certification, self-evaluation, and guidelines for remote education work practices, proving the importance of the VirtualEDU initiative for the future of work in Europe.

### *Implementation activities*

Divided into five work packages (WP), the project proposal clearly defined the activities and responsibilities of each partner, as presented in Table 1. The three-year project covers a complex array of activities, starting with the identification of existing course offerings and continuing with best practices and research conducted to define the skill gap of remote educators, workers and managers. Further, the training methodology is based on defined skill cards and learner personae (target groups and associated roles). The learning content is developed based on the designed methodology, and the course is piloted on the e-learning platform. Throughout the project's lifetime, dissemination activities are conducted to raise awareness and increase the visibility of the project and its impact. Finally, the certification scheme is designed and delivered, and the course is accredited.

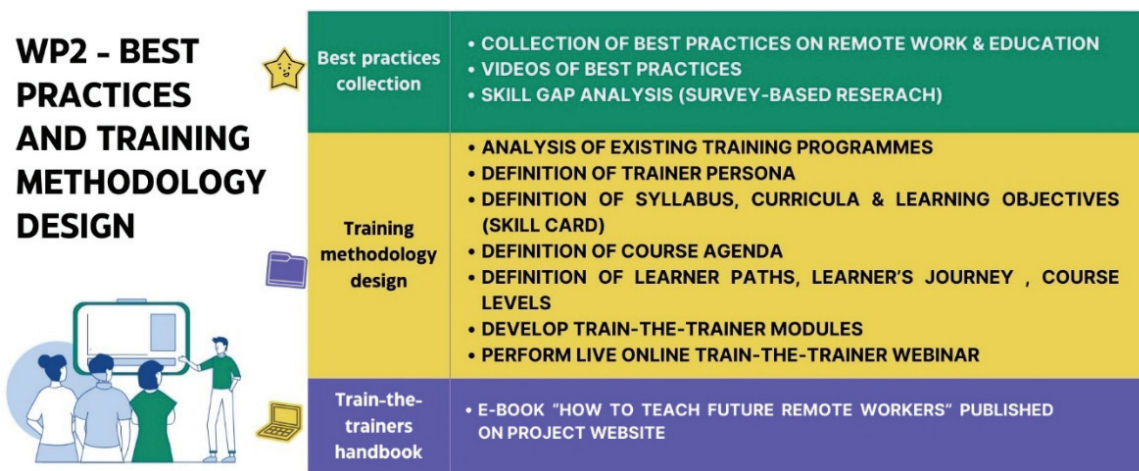**Table 1: Work packages and corresponding activities**

| Work package | Key activities | Lead partner |
|---|---|---|
| WP1 – Project Management | Financial management<br>Quality control<br>Progress tracking and achievements<br>Risk management<br>Time management<br>Communication<br>Virtual and face-to-face meetings | West University of Timisoara |
| WP2 – Best practices and training methodology design | A collection of best practices of remote work and education<br>Skill gap analysis<br>Analysis of similar courses<br>Training methodology design: learner personae, learner journeys, curriculum/syllabus of the course by persona, course structure, skill cards, reference process models<br>A collection of training methodologies<br>An e-book for training the trainers<br>Webinar for training VirtualEDU trainers | Politehnica University of Timisoara |
| WP3 – Digital content design | Development of learning content<br>Digital library set-up<br>Development of remote work starter kits | University of Rijeka |
| WP4 – Implementation and piloting | E-learning platform set-up<br>Performing Massive Online Open Courses (MOOC)<br>Train-the-trainers live events (LTTA) | BICERO |
| WP5 – Dissemination and sustainability | Dissemination activities (on social media, project website, consortium partners' own communication channels, etc.)<br>Development of Certification system and course accreditation<br>Development of sustainability, business plan and agreements | Denkstatt Romania ECQA |

## Results

### *Work package 2*

The project started in November 2022; hence, at the date of elaborating the present paper, the project met its one-and-a-half-year milestone.

The consortium successfully finalised deliverables according to the initial schedule. Hence, WP2 was completely finalised, and WP3 is close to completion.



**Figure 1: Key outcomes of WP2 (Authors' own conception)**

Per Figure 1, the second work package (WP2) consisted of three main activities: best practices collection, training methodology design and the 'train-the-trainers' handbook. The first activity started with a study on the best practices and success stories for remote education and work. Each consortium partner presented three best practices, most of which were from their own practice or inspired by key collaborators. This proves once again the consortium's expertise in the certification program's development. Then, each partner created short videos on the best practices presented, offering a visually appealing format for their promotion.

The second part of this activity was the skill gap analysis. The methodological approach was the following:

- Focus groups were organised with experts in the field to decide the structure of the questionnaire
- Conception, testing and validation of the questionnaire
- Distribution of the questionnaire and collection of responses from consortium partner institutions
- Analysis of results and conception of the competency matrix
- Country reports reflecting the skill gap and corresponding training needs.

The consortium collected 288 responses, based on which the competency matrix was designed. According to the respondents, the most stringent training needs are digital competencies (effective written and online communication, online safety, information and data literacy), self-management and organisation skills (time management), specific skills for educators (using digital technologies and services to enhance interaction with learners, and planning and implementation of digital devices and digital content in the teaching process) as well as collaboration competencies (peer collaboration and objectivity toward peers' opinions).

This step was extremely important, as it oriented the training methodology and the structure of the course, which were part of the second activity of this WP. Starting from the analysis of similar courses available in the EU and based on the competency matrix, the consortium partners collaborated to define the course structure and learning objective for each learning element (skill cards). Further, all the other components of the training methodology were designed. Internal and external expert reviews were performed to validate the training methodology. The trainer course was then developed, and a live online training event took place (in the form of a webinar).

The last activity of WP2 was creating an e-book dedicated to VirtualEDU trainers. The book covered innovative pedagogies, technical aspects, and implications of delivering online training programs. The e-book was also subject to internal and external expert reviews, thus ensuring high-quality outputs across the work package.

### *Work Package 3*

Based on the methodology designed in WP2, the consortium proceeded to create the learning materials. This digital library will be used to perform the training program. Exam questions are also defined based on the learning content, completing the framework for assessing the learning outcomes. Also, as part of this, WP starter kits for each learner persona are designed and include tools, instructions, manuals, reference process models, materials, workplace ergonomics and set-up instructions, and technical requirements.

### Conclusion

The VirtualEDU project is an innovative initiative aimed at responding to the rising need for remote workers, managers, and educators to upskill to overcome the key challenges specific to

their professional practice in remote arrangements. The project's training program covers starting from digital competencies, continuing with self-management and organisation, communication and collaboration, project management skills, work-life balance, ergonomics of the remote workplace, and specific skills for remote educators. The official recognition at the EU level of the certification scheme and validation of the outputs by internal and external experts certifies the high quality of the outputs and reliability of information presented in the project deliverables.

The project is estimated to be finalised in autumn 2025, meaning there is still work to be done. However, the good results obtained to date undoubtedly guarantee the prospect of successfully finalising the project. In the context of expected increases in the number of remote employees and intensified digitalisation of the educational system, the VirtualEDU certification scheme is a valuable tool for upskilling and self-development of remote workers, managers, and educators worldwide.

## Acknowledgement

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