Framework for the StudES University Teacher Training Programme:

"Advanced teaching for students' engagement, wellbeing, and success
in a digital learning environment: Mind the gap!"

Contextual background and purpose of the programme

Challenges in online teaching during the pandemic

The Covid-19 pandemic, which led to a disruption in the work of educational institutions across the globe, was the first time for many university teachers to organize their teaching in an online environment. Studies show that, even though many university teachers were not trained to work in such an environment, most of them did manage to organize so-called Emergency Remote Teaching (ERT) in a manner that allowed continuity in students' learning. However, many teachers and students were not fully satisfied with the quality of ERT, as they were facing various challenges, primarily in terms of maintaining students' motivation and engagement, quality of teacher-student interaction, and interaction among students, etc. These challenges are likely related to how online teaching was organised. Namely, research findings indicate that teachers primarily relied on synchronous manner of work and provided lectures to students via video-conferencing platforms such as Zoom, Google Meet etc. Even when teaching/learning was asynchronous, dominant activities were posting or sending materials for student's independent reading and providing students with working assignments, while more interactive activities and elements (e.g. discussions, group work, quizzes, gamification etc.) were far less represented.

Teachers' self-assessment of online teaching competencies reveals a need to further support them especially in the following areas: how to create a learning community around an online course; how to prepare good quality audio/video materials; how to motivate and engage students; how to create an atmosphere which favours discussion among students; how to monitor student progress.

Looking beyond the pandemic

Even though the pandemic will eventually end, we can expect that, driven by experience from ERT, teachers will be motivated to incorporate the use of technology in their regular teaching practice, organize blended learning courses, and/or offer their courses fully online. Given that ERT in the time of the Covid-19 pandemic did have some, but not all, features of good online teaching/learning, there is a need to provide a training programme for university teachers who are willing to learn more about online teaching/learning and continue to develop their competencies for teaching in a digital learning environment. Therefore, the programme is based not only on insights on student and teacher experiences during the ERT, but also on well-established frameworks of digital competencies for teachers, such as *DigCompEdu*[1], more precisely - on the part related to teacher pedagogical competencies.

---

[1] https://ec.europa.eu/jrc/en/digcompedu

As most university teachers are now "equipped" with some experience in ERT, the training programme will be focused on *advanced* skills for teaching in a digital environment, i.e., it will be offered to teachers who have basic digital skills and experience in using various online tools in an educational context. However, as the target group of the programme are university teachers who come from different countries, scientific fields, and are likely to have various experience and approaches to teaching, the programme will, to some extent, cover the basics of online teaching/learning, to set the common pedagogical ground for further work on development of online teaching competencies.

Programme goal: to provide support to university teachers in the development of digital competencies and advanced use of new technologies for improved students' engagement, wellbeing, and success in a digital learning environment.

Expected outcomes:

1. Teachers will be able to understand and evaluate the potentials and limitations of teaching/learning in an online environment.
2. Teachers will be competent to plan, create, and implement a course in an online environment.
3. Teachers will be able to plan online teaching/learning and assessment activities aimed to foster students' engagement, wellbeing, and success in online learning, in accordance with students' needs and available resources.
4. Teachers will be competent to create and modify different types of learning resources and materials.
5. Teachers will expand their repertoire of online teaching/learning tools and platforms.

Programme structure and contents

Module A: Introduction to teaching and learning in an online context

- A1. Teaching/learning in online higher education: characteristics, potentials, and limitations
- A2. Specifics of teaching online in different scientific fields
  - A2.1. Specifics of teaching online in different scientific fields: lessons on science subjects
  - A2.2. Specifics of teaching online in different scientific fields - humanities
- A3. Student-centred approach in online environment
- A4. Modalities of online teaching: synchronous vs asynchronous
- A5. Blended learning and its various forms adapted to individual needs

Module B: Planning and creating an online course

- B1. Didactic relation model: phases and aspect of online course planning
- B2. Supporting students to participate in online course (Five Stage Model)
- B3. Supporting students' digital literacy within online courses

- B4. Creating learning environment: building community, personalising, and supporting students' well-being
- B5. How students learn and how can teacher support their learning in an online environment (Kolb's learning cycle)
- B6. Learning management systems: why use them? (Moodle as an example)
- B7. UX and NLP support in content creation: make it student-friendly

Module C: Designing teaching/learning activities and educational resources for the digital learning environment

- C1. Types of activities in online teaching (introductory activities, energizers, learning activities, reflective activities)
- C2. How to design engaging learning activities and choose digital tools (constructive alignment; e-tivities)
- C3. Cooperative learning in an online environment
- C4. Gamification in online teaching/learning
- C5. Using authoring tools to create interactive materials and activities
- C6. Making attractive and engaging presentations
- C7. Creating video resources and interactive video lectures
- C8. How to deliver successful webinars/ synchronous lectures
- C9. Time-saver - reuse of materials

Module D: Designing evaluation and assessment activities in a digital learning environment

- D1. Course evaluation and student assessment - types and functions
- D2. Grading criteria and grading rubrics
- D3. Knowledge tests in an online environment
- D4. Building cheating-proof exams: test for skills
- D5. Formative assessment and feedback in online learning
- D6. Self- and peer assessment in online learning environment

Programme design

The programme will be designed based on the *constructive alignment approach* – starting from the specification of learning outcomes (based on desk research and university teachers' needs analysis, as well as well-known frameworks of competencies for teaching in digital environment), learning activities and resources will be designed, as well as the assessment strategy to evaluate the learning outcomes, participants satisfaction with the programme, etc.

The programme will be based on an *active learning approach,* i.e., a *learning-by-doing paradigm.* It will allow enrolled teaching staff to experience the recommended innovative online teaching and learning approaches from the student perspective, but also encourage them to design innovative learning activities and resources, tailored to the specific needs of the courses for which they are responsible. Moreover, the participants will be encouraged to

trial newly developed skills and resources in their teaching practice and to share and reflect on their experiences with their colleagues.

To foster learners' participation and socialisation, as well as to support their progression through the programme, we will rely on the *Five Stage Model*.[2] Technical and pedagogical support will be built-in to the programme and provided to learners throughout their learning process (Table 1).

Tabel 1: Support to be provided at each stage

Stage	Support to be provided (not limited to listed below)
1. Access and Motivation	• ensuring that learners have access to the Moodle platform; • welcome video or a video-conference meeting[3] to introduce the programme and provide guides for taking part in it; • information on where to seek help.
2. Online Socialisation	• first assignment for the learners will be to introduce themselves and share their expectations from the training (e.g. through video platforms such as Flipgrid); • use of forums and other social tools to encourage discussion among learners on their experiences in online teaching.
3. Information Exchange	• support to take part in learning activities and use learning resources will be provided in each lesson (e.g. by stating learning goals, providing clear instructions for tasks, etc); • learners will be directed to ask questions/share dilemmas related to the learning tasks on the programme on the designated user forum.
4. Knowledge Construction	• moderators will facilitate forum discussions and provide feedback to learners; • when appropriate, moderators will facilitate peer learning to help build a community of learners within the programme.
5. Development	• final module assignments will provide opportunities for learners to show how they apply what they've learned in their own context; • social networks will be utilised for building a community beyond the programme lifetime; • resources for further learning will be provided.

---

[2] Salmon, G. (2011). *E-Moderating: The Key to Online Teaching and Learning.* Routledge.

[3] Depending on the possibility of arranging such a synchronous meeting with participants.

In *designing learning activities*, we will rely on didactic recommendations that are common to models of active learning which are conceptualised specifically for online teaching/learning (e.g. e-tivities), as well models that were developed for classroom teaching, but are used in online learning environment too (e.g. 5E, ERR, etc). Namely, activities will be structured so as to: 1) trigger learners' interest, motivate them for learning, and activate their prior knowledge and experiences; 2) provide learners with meaningful, engaging, and challenging learning activities/assignments; 3) enable exchange and discussion among learners, and support their reflection.

Programme implementation

The programme will be delivered as a *joint online short training programme* offered to academic staff at the participating universities and the wider academic community. It will be delivered as a *modular online learning programme*, in *English as a language of instruction*, hosted at the University of Belgrade eLearning *Moodle platform*.

Having in mind that the target group consists of employed adults, the programme will be organized in *asynchronous* and *self-paced* mode, with moderation. To encourage community building, online forums and social network groups will be used.

Programme evaluation and assessment

Starting from the learning-by-doing approach, the assessment of training participants' progress will involve the following components:
- ✓ *Completion of tasks within lessons on Moodle*, e.g., a short quiz, reflection on their own practice, participation on the forum, assignments, etc.
- ✓ *Final assignment* for each module:
    - ○ Module 1: short knowledge test.
    - ○ Module 2, Module 3, and Module 4: reflection on topics and practical activities covered by modules (e.g. reflection on planning an online course, reflection on planning teaching/learning activities and resources, reflection on evaluation/assessment activities in online context).

According to the estimated time required for completion of individual modules (to be determined) and the training programme as a whole, participants will be awarded ECTS according to the number of modules they elected to attend and completed successfully.

The training programme will be evaluated during and after the pilot implementation, which is expected to commence in September 2022 with a cohort of 30 participants. Data gathered on participants' activities throughout the programme and their learning outcomes and progress, as well as feedback received from the participants on their learning gains and satisfaction with the programme, will be used to review the programme and further improve it for implementation with the larger group of participants.