UNIVERSITY TEACHERS' DIGITAL EMPOWERMENT FOR BLENDED TEACHING: AN ONLINE TRAINING DESIGN

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Abstract

Because of the impact of the pandemic in the different sectors of society, blended training solutions have acquired, in the field of education, an important relevance, speeding up a change that would normally require years to be developed.

Teachers from all levels of education had to adapt and develop their practices using digital technologies without enough knowledge to do it properly. Considering this context, this paper will present the design of an online training that seeks to empower university teachers to take advantage of the potential of digital technologies to design and implement educational practices in blended settings while they acquire Digital Competences. This training will be applied with a challenge-based learning methodology and from a collaborative perspective. In addition, participants will develop the role of students and teachers at the same time in order to design blended educational practices that respond to the needs of their own students.

The proposed training, that will be designed by teachers from the Open University of Catalonia with wide experience on training in Digital Competences and online teaching, will be implemented in 6 countries around Europe (Italy, Spain, Ireland, Greece, Cyprus and Finland), will be developed in the framework of the European project Empower Competences for Onlife Learning in HE (ECOLHE).

Introduction

The rapid and constant changes technology is experiencing and the changes it causes to different sectors of society require an updating of the understanding and knowledge about digital technology continuously. It is not enough anymore to have basic skills of using computers. In fact, the DigComp framework defined by the European Commission (Carretero Gomez et al., 2017) considers more complex dimensions such as information

literacy, communication and collaboration or safety. Actual citizens must acquire these skills to properly develop their lives in the digital society, so education has an important role to provide it. This condition causes the need of teachers to develop these new skills, as the European Framework for Digital Competence of Educators, DigCompEdu highlights. This framework (Redecker & Punie, 2017) responds to the awareness of member states that educators need a set of specific digital skills for their work as teachers, in order to take advantage of the potential of digital technologies for improvement and innovation in education. The view from the teaching practice and intervention in the classroom becomes the key and responsible for the integral development of its students, both personally and professionally, in a cultural scenario dominated by digital technologies.

These skills take more relevance in the actual situation of a pandemic, which forced teachers to adapt to online and blended settings without having the necessary technical and methodological skills to do it.

Considering this context, the European project Empower Competences for Onlife Learning in HE (ECOLHE) (co-funded by the Erasmus+ Programme of the European Union) aims to examine the way in which the idea of an E-learning European HE Area has been translated into practice at national level by Academic Bodies. This project, which gathers a consortium from 6 EU partner countries (Italy, Spain, Ireland, Greece, Cyprus and Finland), is an action research project that aims to create the best conditions for an exchange of best practices, at European level, in:

- Teaching digital skills in HE;
- Training course for teachers and tutors for improving online teaching in HE in the logic of LLL, inclusion and innovation recalled by High-Level Group on the Modernization HE;
- Recognition and validation of teaching competences in HE for teachers' professional development and
- Recommendation for Academic Bodies.

This paper is focused on the second point, the background and design of the Training for teachers and tutors, seated on a "Training Pilot for online teaching in HE" to implement online training to empower educators to perform online/blended learning, more responsive to the qualitative dimensions of human interaction. This training will be designed by the Open University of Catalonia (UOC) partners, taking profit of the experience developed on training in Digital Competences and Online teaching for almost 25 years.

Training Pilot for online teaching in HE: background and objectives

Blended Learning (BL) is more than a combination of face-to-face and online elements. Following Armellini and Padilla (2021), "BL is an approach that incorporates a range of dimensions that interact with and shape one another in an educational intervention". They represent these dimensions in a cross chart, where any BL proposal can move integrating them in between each axis extremes. Some other dimensions that can be taken into account are, as example: Synchronous – Asynchronous, Individual work – Collaborative work, Peer assessed – Tutor assessed, etc.

The flexibility of this vision of BL allows and requires us to design a training in which participants can move along each axis. Therefore, different methodologies, sources and tools will be shared, opening the possibility to follow different paths to be engaged in BL, depending on the needs of each participant, with some of these possible routes illustrated with an active practice involving participants.

The training will have to empower teachers to be competent for the design, implementation and assessment of online/blended teaching activities through the improvement of their digital competences and promoting their professional development. This research adopts the definition of digital competence seated by Ferrari (2012) because of its openness and in context application:

> *"Digital Competence is the set of knowledge, skills, attitudes (thus including abilities, strategies, values and awareness) that are required when using ICT and digital media to perform tasks; solve problems; communicate; manage information; collaborate; create and share content; and build knowledge effectively, efficiently, appropriately, critically, creatively, autonomously, flexibly, ethically, reflectively for work, leisure, participation, learning, socialising, consuming, and empowerment".*

The training will be online, and it will be led by Universitat Oberta de Catalunya (UOC) that will prepare and manage directly the training modules considered essential for emerging teaching skills in the digital era. The rest of universities involved in the project participate firstly giving feedback about the global design and content, and secondly piloting the training within their universities: around 150 people totally 25 for each of the 6 study cases among teachers, researchers, PhD students, tutors and academic staff who are already involved in teaching innovation processes and who are therefore interested in updating their methodological digital and soft skills.

To achieve these objectives, the Training Pilot will regard the following activities:

- the training in digital competences for online teachers,
- the training for online teaching emerging methodologies,
- the training in soft skills and communicative skills for digital environments,
- the creation and dynamization of an international community of practice among teachers,
- provide tutorial for trainers, training materials (contents, resources, OER etc.) and
- generate a final evaluation and report to assess the overall piloting result.

During the four months dedicated to piloting, partner countries involved will have the opportunity to discuss the progress of the investigation. ECOLHE Moodle Platform will be the main tool through which partner countries will collaborate to the resolution of any question and to facilitate collaborative work.

After de Pilot implementation and its evaluation, the experience and outcome learnings will provide an innovative training model that can be replicable to other HE institutions to promote online teaching and key teaching competences in the digital era.

Training Pilot for online teaching in HE: design

One of the most frequently used Instructional Design strategies is the ADDIE framework. ADDIE consists of the following five phases: Analysing a learning situation, Designing objectives and principles to address the learning situation, Developing of resources, Implementing the learning resources in the learning situation, and Evaluating how these resources addressed instructional needs.

To develop the training proposal, the ADDIE framework is adopted twice, as a fractal in two different scales: as a guide to develop the training itself, and as a guide to develop each training activity. Figure 1 shows how ADDIE is applied to design the whole training:
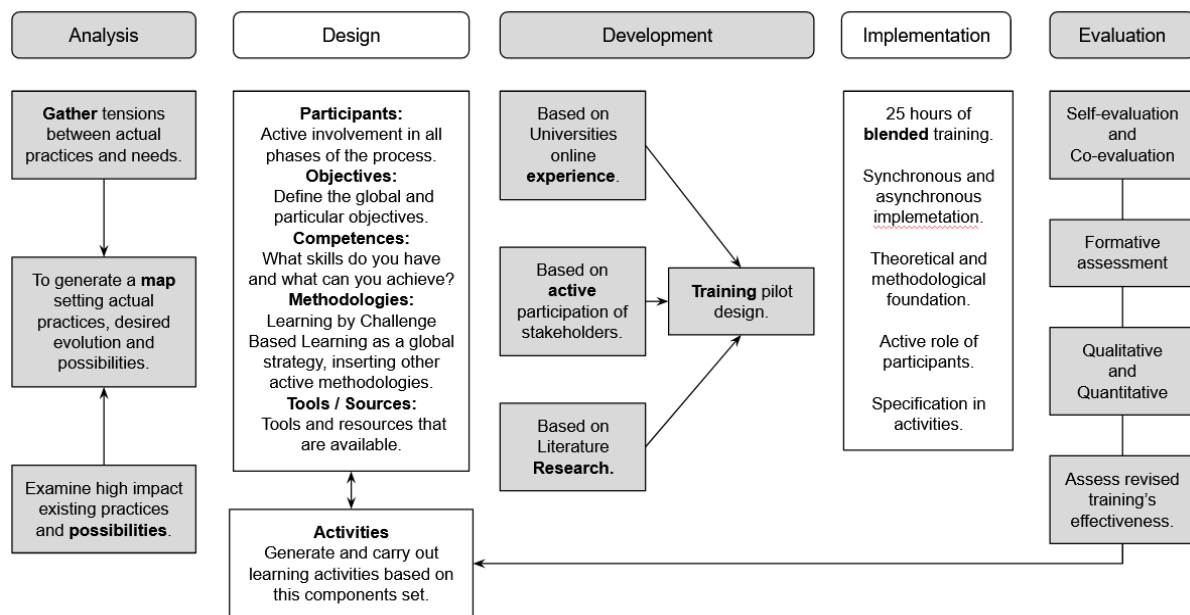
Figure 1. ADDIE model applied to the global training design. Own elaboration based on Nichols and Greer (2016)

Following the ADDIE model, and with the focus in design the training pilot description is specified below:

The main objective of the training is to update emerging digital competences for online and blended teaching in HE, for increasing teachers' ability in the use of digital technologies through online collaboration environments in HE.

Regarding the competences that participants will acquire, it is necessary to choose the ones they will develop when designing any training or activity. In this case, the proposal includes the Digital Competence as cross competence, and some specific competences related to blended teaching design and teaching strategies implementation.

We take DigComp.Edu as a competence framework for Digital Competence, and we choose some of the competences that this framework defines.

To provide space for reflection and practical application, Competences Areas and Competences from the DigCompEdu framework will be collaboratively selected for this training and associated with each activity. The areas of DigCompEdu that will be considered are the following:

- Professional engagement,
- Digital Resources,
- Teaching and Learning,
- Assessment,
- Empowering Learners,

- Facilitating Learners' Digital Competence.

The training will be developed through Challenge Based Learning (CBL). This methodology involves the definition of a solution to a real and very relevant situation linked to participants' environment, in this case involves the collaborative design, implementation and evaluation of a learning situation directly applicable to participants' teaching practice.

When developing their own activities, participants will choose specific methodology (such as Project Based Learning, Case Study or Problem Based Learning) from a wide range that will be described in the training guides.

Bearing in mind that the training will be conducted fully online, training activities will be developed in a Moodle environment and all contents will be presented with a set of digital and open educational resources (OER) organized by the competences of the training. Guides, tutorials, rubrics and other evaluation instruments will be also created.

The training presented will be designed and implemented following both macro and micro perspectives, as previously stated, there will be implemented as a training pilot in order to validate a training model that could be exported to other university contexts.

Training Pilot for online teaching in HE: development, implementation and evaluation

During the pilot, participants will be involved not only receiving theoretical training on online teaching, but also designing, implementing and evaluating their own online activities. A space for reflection and work based on the teaching practice will be created to acquire the teachers' digital competence. The training participants have an active role and will work collaboratively in teams, playing teachers' and students' roles in different phases of the training.

Regarding its planning, the training pilot is structured in different activities, two synchronous and four asynchronous, with a total workload of 25 hours.

Activities description

The activities of the training will be organised as follows:

Introduction – Synchronous

This activity, developed in a webinar format, will consist in a synchronous activity sharing the Training with the involved partners, including an introduction, training development, methodology, materials, etc.

Activity 1: Analysis of a learning activity – Asynchronous

During this activity, participants will analyse an online training proposal developed by UOC for students. In this activity, participants will work in collaborative groups, guided by a template and share their analysis with the rest of participants. This activity is focused on knowledge of a set of digital resources (OER) organized by the seminar competences.

Activity 2: Activity design – Asynchronous

In this activity, participants will apply what they will be learning during the training and will collaboratively design a blended learning activity addressed to their students.

Activity 3: Activity implementation – Asynchronous

Each university manages two of the designed learning activities playing two roles. As teachers implementing one of these activities, and as students performing the other activity designed by another group.

Activity 4: Activity evaluation – Asynchronous

Each group evaluates the implemented activities following an evaluation guide provided by UOC.

Conclusion and training evaluation – Synchronous

Involving all the participants, a final synchronous activity to evaluate the training pilot will be conducted.

The assessment of the pilot is based on continuous assessment and takes into account the different agents involved in the learning process. The teacher will provide feedback to participants during the seminar in order to guide their training process. Participants are also an active part of the assessment process performing self- and co-assessment activities. In addition, participants will assess the training itself.

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