# PROJECT ERASMUS+ IDEAS: INNOVATIVE DIGITAL EDUCATION AND SKILLS

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## ABSTRACT

This project is being developed in response to a European-wide need to improve teacher digital skills and competences in light of the COVID-19 pandemic and the rapid move to a fully online or blended approach to teaching, learning and assessment. In addition, technological innovations in the area of teaching and learning are leading to new challenges as educational institutions learn to adapt to new pedagogical approaches and digital tools. So, this communication aims to present the Innovative Digital Education & Skills (IDEAS) Erasmus+ project, and help tackle the digital skills gaps across Europe. The project intends to build new tools and create a community of mentors, with the development of a Community of Practice on LinkedIn, where teachers can share best practice pedagogical approaches, culminating in a Best Practice Guide which will offer a step-by-step guide for developing digital competence in their specific education setting.

## KEYWORDS

Online innovation, digital education, digital competences, teacher training.

## 1. INTRODUCTION

Unsurprisingly, technology was frequently mentioned on papers, with some reporting that it was key in online classroom settings through the promotion of communication and fostering of dialogue (Jung and Brady, 2020). In addition, students view of the disadvantages of online learning have consistently reported the problems of unsuitable hardware and insufficient internet bandwidth, and some studies mentioned issues with the technology hindering learning (McBrien et al, 2009; Middleton and Smith, 2013; Donelan and Lear, 2017; Erikson et al, 2020).

In the wake of the COVID-19 pandemic, teaching professions face rapidly changing demands and educators require an increasingly broad and more sophisticated set of competences. It has become a priority to provide education and training systems with the means to face the challenges presented by the recent shift to online, blended and distance learning, including supporting teachers to develop digital competences as well as ensuring they remain inclusive.

Digital transformation means reinforcing the ability of education and training institutions to provide high quality, innovative and inclusive digital education, namely:

- Building capacity to implement online, blended and distance teaching and learning;
- Developing digital pedagogy competences of educators, enabling then to deliver high quality, inclusive digital education and/or;
- Using high quality digital content such as innovative online resources and tools.

This IDEAS project offers the opportunity for partners to upskill teachers and develop their organization's capacity by facilitating innovative learning experiences which will ultimately positively impact learners. Project partners bring together the expertise, skills, and experience to develop a 30-hour digital teacher training course using adaptive learning models which will enable teachers, from any curricular area of Vocational Educational & Training or Higher Education, in the partner countries to improve their digital competence. The IDEAS partnership involves Universidade Aberta (Portugal) and other European partners, such as SERC, (Northern Ireland); B&P Emtech Consultancy Lab Ltd (Malta); Forth Valley College (Scotland); and SmartLearning (Denmark).

Learning will be recognized through Europe wide accreditation, digital badges, and supported through a network of mentors. The project is developing a community of mentors and promoting the growth of a LinkedIn Community of Practice where teachers can share best practice pedagogical approaches, culminating in a Best Practice Guide which will offer a step-by-step guide for developing digital competence in their specific education setting.

## 2. DEVELOPMENTS

Overall, the project aims to promote innovative methods and tools for teaching, training, learning and assessment. Essentially, it involves the creation of a critical asset for helping teachers achieve excellence in digital education, but also build a vehicle for continuous professional development in the field of digital education.

### 2.1 Aims and objectives

1. Develop a 30-hour digital teacher training course using adaptive learning models which will enable 64 teachers from any curricular area of VET or HE in the 4 countries, to improve their digital competence and skills using a personalised micro-credentialed training package with support from 16 IDEAS Mentors;
2. Recognise the learning of those undertaking the course through Europass Mobility, Digital Badges and Certificate of Attendance;
3. Establish robust accreditation for the digital training course by Universidade Aberta which can be applied across Europe;
4. Pilot the course with 64 teachers in 4 countries with support from 16 IDEAS Mentors ensuring functionality as well as meeting the skills needs;
5. Build a Community of Practice on LinkedIn for IDEAS Mentors, IDEAS Teacher Mentees and educators from partner organisations to share and collaborate on the innovative results achieved;

6. Produce an electronic Best Practice Guide for teachers supported by empirical data and own findings, which will offer a step-by-step remote guide to developing digital competence and pedagogical approaches individually and within their VET/HE educational setting.

At Universidade Aberta many activities are underway, with the support of LE@D, so far we were able to accomplish some of the goals, namely, a **review of literature** to identify and define the required digital skills and competences in view of the Digital Education Readiness agenda; the design and development of a **survey** using an online questionnaire aimed at performing a **gap analysis** by establishing the current state of digital education readiness; administration, collection and analysis of survey data; creation of a **learner persona**, thus effectively establishing the course's target audience and identification of the respective training requirements and needs (based on the analysis of survey data); design and production of **digital modules**, pedagogical models and user manuals.

## 2.2 Interim results

The analysis of survey data clearly reveals some competencies that need to be addressed in teachers' training, to endorse innovative digital education and skills, which we have summed up in table 1.

**Table 1**. Digital competences to be addressed.

| COMPETENCE | DESCRIPTION |
|---|---|
| Supporting a safe, inclusive online environment | Uses proper regulation and feedback practices to support more engaging, safe, and inclusive digitally enriched learning environments. |
| Adopting a digital assessment culture | Adopts and implements practices promoting an alternative digital assessment culture in educational practices. |
| Using learning analytics for student success / Comprehensive analysis of data to promote students' success | Understands and uses learning analytics as a tool to profile students' needs and inform decisions and solutions for students' success. |
| Using digital forms of providing effective feedback | Develops and uses digital tools to provide effective feedback aligned with a digital assessment culture. |
| Understanding accessibility issues | Understands and implements digital accessibility patterns in educational practices. |
| Designing personalized learning experiences | Includes students' needs and specificity in the design of digital learning experiences. |
| Promoting networking skills | Promotes collaboration and communication outside the learners' community to develop networking skills. |
| Authoring digital content | Implements activities of digital content authoring. |
| Creative Digital Problem-Solving | Adopts and implements activities that foster creative digital problem-solving. |

We can also order these competencies according to their nature. Thus, we have *technical competencies* (authoring digital content, creative digital problem-solving), *communicative-collaborative competencies* (providing digital feedback, promoting networking), *safety and accessibility competencies* (supporting a safe, inclusive online environment, understanding accessibility issues), and *pedagogical competencies* (adopting a digital assessment culture, using learning analytics for student success, designing personalized learning experiences).

The outcomes of the survey identified the "learner persona": a female, aged 40-59, who teaches an adult population for 20 or more years, in areas other than "education", mostly at a distance. She has been using digital technology in teaching for the last 6-14 years, and in the last 3 months, she does it quite often. The digital technology she uses are presentations, basic video watching, digital quizzes/polls, and (non-specified) online learning environments. She considers having a moderately high level of digital competence. She needs the training to develop technical order competencies (such as authoring digital content and implementing creative digital problem-solving), communicative/collaborative order competencies (such as providing effective feedback through digital forms and promoting networking activities outside the virtual learning community ), safety and accessibility order competencies (such as supporting a safe, inclusive online environment, and understanding and implementing accessibility issues), and pedagogical order competencies (such as adopting a digital assessment culture, using learning analytics to address student success, and designing personalized learning experiences).

We this in mind, we started to develop learning modules and a virtual community of people who have a common interest in digital competences for teachers. The main topics are: using accessibility features, planning for learning, blended learning approaches, AI & gamification, digital storytelling, 21st Century skills (SL), innovation in online learning, learning analytics, netiquette and e-safety, Moodle advanced, and e-assessment. The community of practice based on these topics started on LinkedIn, highlighting the transformations brought about by new technologies, and emphasizing how we think about ourselves. In particular we are no longer passive consumers of the media, but, increasingly, also actively producers.

## 3. FINAL CONSIDERATIONS

Many argue that innovations in digital learning will benefit all. More likely, technology will reinforce rather than challenge existing potential and opportunity. We have seen during the pandemic the success with which professionals have evolved, commute-free, during the lockdown, largely because of the connectivity facilitated by digital technologies. So, it's difficult to predict what changes in teaching and learning will persist after the pandemic ebbs, but certainly there will be interesting developments with the rise of blended, hybrid, or flexible classes, which allow students and teachers to participate either online or in person. This also means an enhancement of pedagogical and didactic knowledge of teachers, making them designers of technology-enhanced learning experiences who need to have a set of skills and competencies in addition to their subject specific knowledge. On the other hand, the distance learning situation raised the awareness of possibilities and affordances of online learning and created a good basis for integrating innovative technology-enhanced teaching methods into higher education settings. We are confident that the outcomes of the IDEAS project will further these aims and provide the opportunity for partners to upskill teachers and develop their organization's capacity by facilitating innovative learning experiences which will ultimately positively impact learners.

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## IDENTIFICADOR DO PROJETO

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## LINK DO PROJETO

https://www.ideas4teachers.org

## LOGO DO PROJETO