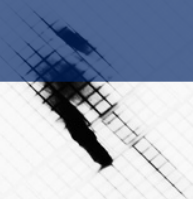
7th edition

EADTU

2023 Envisioning Report

exploring **new modes of teaching & learning** for empowering universities



Generative AI & LLM
Mobile learning
MOOCs

Microcredentials
Green Campus
Learning Analytics

OER
Quality Assessment
Remote laboratories

Editing, logistics and lay-out
George Ubachs and Stefan Meuleman
European Association of Distance Teaching Universities (EADTU)

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Università Telematica Internazionale Uninettuno, Anadolu University, Fachhochschule des Mittelstands, Liepaja University and Proctorio GmbH

Project IDEAS: An Innovative Digital Education and Skills Approach

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Innovative impact
The Innovative Digital Education and Skills (IDEAS) Project is an ERASMUS+ project involving four European countries (United Kingdom, Malta, Denmark, and Portugal), aiming to improve teacher digital skills and competences through a 30-hour microlearning teacher training course. The output consists of bite-sized modules using adaptive learning models enabling teachers from any curricular area of Vocational Education & Training or Higher Education to increase their digital competences and skills. It is supported by a personalised training package with support from specially trained IDEAS Mentors. The project follows the EU's Digital Education Action Plan (2021-27) Strategic Priority 1: "digitally competent and confident teachers".

Keywords: teacher training, microlearning, digital skills, adaptive model

Introduction

The IDEAS project represents an opportunity to upskill teachers by improving their digital competences and developing the organisation's capacity, namely by facilitating innovative learning experiences which will, ultimately, positively impact learners. It is based on a literature review and a needs analysis that was conducted through an online survey (assessing 99 teachers' strengths and weaknesses in using digital technologies in education). The following gap analysis of the survey answers identified 4 main areas of digital competence in which teachers felt they needed training:

- technical;
- communicative/collaborative;
- afety/accessibility;
- pedagogical.

The instructional design of the course was framed by a 'learner persona' also profiled from this analysis. A pilot teachers' training programme to test the functionality of the e-learning platform, design, quality, and impact of the content and educational resources was implemented.

The recent COVID-19 pandemic revealed the lack of preparation of teachers to successfully adopt digital transformation into their professional and teaching practices, thus putting into evidence the need for digital education programs to promote and develop digital competences among teachers worldwide. We consider this to be a core issue regarding the preparedness of teachers (or the lack of it) in the post-pandemic context.

IDEAS Framework
The DigCompEdu (2018) establishes the digital skills and competences educators need in contemporary teaching environments. The framework is structured by a total of 22 educator-specific competences for teaching, within 6 main competence areas:

- Area 1 - professional environment;

- Area 2 - sourcing, creating and sharing digital resources;
- Area 3 - managing and orchestrating the use of digital tools in teaching and learning;
- Area 4 - digital tools and strategies to enhance assessment;
- Area 5 - the use of digital tools to empower learners;
- Area 6 - facilitating learners' digital competence.

However, the use of digital technologies in education presents several challenges concerning digital poverty amongst students, namely, access to reliable technology (internet, hardware, software) impacts their ability to participate effectively in their learning. Therefore, a key objective of this project is to address some of the practical issues around equity and inclusivity. Also, online learning plays an important role in the pursuit and achievement of the Sustainable Development Goal 4 (UNESCO, 2019), which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

In this context, the IDEAS Pedagogical Framework was developed as a model of self-paced learning with peer support and guidance, framed by the concept of a Continuing Professional Development Academy, and supported by an online Virtual Community of Practice and a Mentorship program. It provides resources and suggestions for ongoing professional development to help teachers stay current on best practices and improve their teaching skills. It's competence oriented, thus addressing the needs of (VET) teachers and recognising the gaps in their digital pedagogical skills. It relies on the combination of online and in-person instruction to create more personalised and effective learning experiences, also providing tips for using online resources, educational apps, and digital tools to enhance teaching and learning.

Microlearning Courses

In line with the preliminary research work, the project developed a 30-hour digital teacher training programme using adaptive learning models which enabled (64) teachers from different curricular areas of VET and HE in the partner countries to improve their digital competences and skills using a personalised training package with micro-credentials.

The teacher training programme is structured around 14 learning courses addressing the 4 areas of competencies identified by previous research results: i) **Technical area** (authoring digital content, creative digital problem-solving); ii) **Communicative/ collaborative area** (providing digital feedback, promoting networking); iii) **Safety and accessibility area** (supporting a safe, inclusive online environment, understanding accessibility issues) and, iv) **Pedagogical area** (adopting a digital assessment culture, using learning analytics for student success, designing personalized learning experiences). The learning stages of those undertaking each course is recognised through digital badges and certificates of attendance.

Participants have the opportunity to develop skills in a set of digital competences throughout the programme with the digital tools and pedagogic strategies of each IDEAS course, namely:

- Blended learning approaches
- Planning for learning
- E-assessment
- Innovation in teaching and learning
- Distance learning and online learning innovation
- 21st Century skills in learning and teaching
- The art of presentation
- Moodle advanced
- Microsoft Teams
- Digital tools for academic writing
- Accessibility
- Netiquette and E-safety
- Survey tools and polls
- The art of presentation

All the IDEAS courses have the same structure and design:

- a self-assessment quiz to start (so the learner can decide if it is necessary to complete the module or move on to another one);
- 3 to 7 content sections;
- varied learning resources (videos, text);
- formative learning activities for each section;
- a final assessment quiz (with grades);
- an extension activity/resources (for those who want to go deeper on the subject) and;
- a feedback form (for further improvement of the learning experience).

Learning content and learning activities, all together, determine a maximum of 2 hours of workload for each course.

The digital learning resources used on IDEAS vary within the courses, according to the type of resource used to introduce or present the learning topics and the learning strategy in use, for instance:

- videos, screen recordings, or voice-over PowerPoints, no longer than 5 minutes;
- reading material (pdf, text)
- infographics
- websites
- software

All the teaching and learning resources were created specifically for the courses, namely, the videos and narrated PowerPoints had the same design template (for coherence) and are available on the IDEAS YouTube channel (https://www.youtube.com/@ideaserasmusproject2542).

The LMS was provided by the partner Copenhagen Business Academy (CBA), through its *Smartlearning* Moodle based platform: https://platform.smartlearning.dk (course registration is free).

Another digital resource available in each course is the IDEAS-BOT, implemented by B&P Emerging Technologies Consultancy Lab Ltd (partner from Malta), a research, development, and consultancy company assisting businesses, organisations, and entities in the design and implementation of innovative digital solutions. The IDEAS-BOT (http://www.ideas-bot.com) uses artificial intelligence (OpenAI) to guide teacher training for stimulating, innovative, personalised, and impactful digital education. It is embedded in the IDEAS modules and provides help in 3 domains of questions: technical help, content-related help, and content-related questions.

Community of Practice

Education and training models have undergone a major change over the last decade. Models are now accepted that use diverse strategies and solutions that complement formal, non-formal, and informal education. These use digital devices and networks that support the design of peer-to-peer and horizontal learning communities, such as communities of practice, mentors, chatbots, and gamification processes of learning, among others. The IDEAS project proposes a solution supported by an online Community of Practice based on LinkedIn.

Communities of Practice, initially in the physical environment, gain new meaning when members share knowledge and gain rapid problem resolution and access to resources through the Network. They enable sharing of knowledge and best practices without the time and space limits, and allow for strong personal relationships between members who have never met personally. They may be valued by participants as relevant learning forums and finally, they should rely on a core of members who provide leadership to the community. The IDEAS Community of Practice has at the moment about 800 followers, and activities are being actively reported on a constant basis (#ideas4teachers).

Conclusion

This framework and the microlearning implementation were directed towards a practical objective within Erasmus+ Project IDEAS, namely, the development of a digital training programme to address the specific needs of VET teachers who feel that their digital competence and skills are insufficient to support teaching, learning and assessment.

Our research suggests that the impact of a successful digital transition will provide an improvement in teachers' digital skills, consequently improving their pedagogical practice, and resulting in improved learner engagement, particularly amongst less able or vulnerable students. This will build competence and confidence in their digital skills and prepare them for the shift to online/virtual/blended teaching and learning approaches in the post COVID-19 era. It is also expected that VET teachers will reflect on their professional practice and be empowered to drive their own learning and development as the tools available will guide them through a personalised training environment that is responsive to their individual needs.

Links for social media pages
https://twitter.com/ideas4teach
https://www.linkedin.com/company/ideas4teachers
https://www.facebook.com/ideas4teach

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