

Extending design thinking with emerging digital technologies

Newsletter

July, 2023

Project meeting in Athens

The face-to-face Exten(DT)2 project meeting took place from March 29 to 31 2023 in Athens, Greece. This meeting lasted three full days and was held in the School of Philosophy Building at the University Campus of the National and Kapodistrian University of Athens. Project members from Sweden, Greece, UK, Norway, Ireland and Belgium attended the meeting, discussed the progress of the project and developed strategies and plans to take this further.



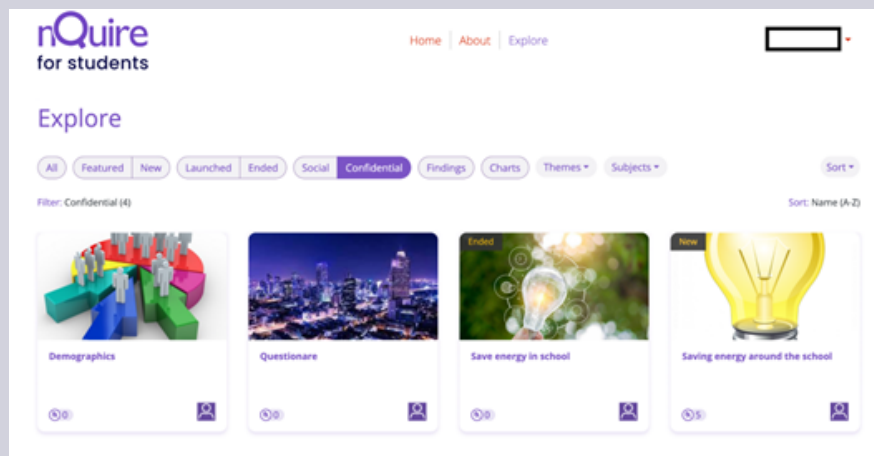
Project partners in Athens Meeting

Pilot implementation of activity plans at schools across countries

Twelve teachers (N=12) across five countries (Greece, UK, Belgium, Norway and Sweden) have participated in the process of co-designing activity plans for design Thinking (DT) in the first year of the project. These teachers were found to have varied experiences with DT, project technologies and overall teaching expertise. Most teachers were new to either the use of project technologies or DT. The following activities using DT and project technologies have been proposed by teachers: eight ChoiCo activities, one SorBET activity, one MaLT2 activities, five nQuire for students activities and one VR activity. The topics teachers chose for their DT projects were influenced by students' interests, school needs and own interests in teaching specific topics. The chosen topics included multiplicative mathematical relationships and computational estimation while shopping, cybersecurity, energy consumption and environmental issues, irrigation system and fire rescue. The choice of specific technologies by teachers was driven by how easy or difficult they perceive a technology to be for their students as well as the suitability of technology to address a chosen topic. Four teachers decided to combine nQuire for students with ChoiCo and one teacher chose to combine nQuire with SorBET. The majority of teachers (six) have decided to use only one technology in their DT plans. Altogether, 202 students in six different schools participated in the pilot implementation of activity plans.

New version of nQuire

A new version of nQuire for students was developed by partners at the Open University. This version of nQuire is designed to enable pupils to get engaged with Exten(DT)2 technologies, specifically in developing studies and collecting feedback from others about their design prototypes. This version is password protected and accessible by students and teachers participating in Exten(DT)2. Based on feedback obtained from both students and teachers during piloting, a fully operational version of nQuire for students is expected to be launched by November.



Studies hosted on nQuire for students

Conference participation and clustering activities with sister projects

Project members of Exten(DT)2 participated in two conferences and going to participate in one more over summer 2023.

Mis4Tel

Project members of Exten(DT)2 took part in the hybrid workshop “Integration of emerging technologies into education and training” at the Mis4Tel 2023 conference (12-14 July 2023, Guimaraes, Portugal). The workshop formed part of the 13th International Conference and Intelligence Systems for Technology Enhanced Learning” which has over 400 participants annually.

Our workshop was organised together with the four “sister” projects also funded under the same Horizon Europe programme call. It was attended by more than 30 participants and provided an excellent opportunity for the sister projects to meet physically for the first time, together with Angel M Fuentes, our EC Project Officer. Each project presented their work highlighting potential applications in different learning areas and industrial contexts. This led to a discussion on future cooperation and ideas on a joint policy paper for the EC.

For Exten(DT)2 Professor Marcelo Milrad from LNU as coordinator presented a joint paper for the consortium and Dr. Sagun Shrestha (OU) participated virtually. Our paper focused on the main components of the proposed educational transformation as developed during the first year of Exten(D.T.)2 including the theoretical foundations of the approach, co-creation processes for meaningful engagement of teachers with educational innovation, educational technology tools and the evaluation approach for capturing impact on improving students' skills and competencies.



Post-panel moment in mis4tel: Professor Marcleo Milrad (at the centre) with other panellists and attendees

ICTMT 16

Dr. Marianthi Grizioti and Maria-Stella Nikolaou presented a paper entitled ‘Enhancing students’ 21st century skills through playing and modifying embodied digital classification games’ at the 16th International Conference on Technology in Mathematics Teaching (ICTMT 16). The conference took place in Athens from June 7 to June 10, 2023 which was organised by the Educational Technology Lab, Department of Educational Studies, School of Philosophy, National and Kapodistrian University of Athens.

EARLI

The paper entitled ‘Extending Design Thinking with Digital Technologies’ is accepted in the 20th Biennial EARLI Conference hosted by the Aristotle University of Thessaloniki and the University of Macedonia, Greece. The conference is taking place between 22 - 26 August 2023. Representing the Exten(DT)2 team, Professor Manolis Mavrikis (UCL) is presenting a poster session in this conference. The poster discusses how design thinking with digital technologies supports teachers' professional development for their meaningful infusion into the current European educational contexts.