

Extending Design Thinking with Emerging Digital Technologies Newsletter

May, 2023

Exten.(D.T.)² Onsite Meeting at the Open University

The two-day onsite meeting with partners was held at the Open University, Milton Keynes between the 17th and 18th of April, 2024. This meeting was attended by 20 project members. On the first day, Eileen Scanlon welcomed everyone to the fourth six-monthly project physical meeting and gave a brief history and background of the Open University. This was followed by a short ice-breaker facilitated by the project manager, Shamim Patel. The first day focused on the discussion on the status of M18 technical report, and data management plan, which was followed by the individual presentations for the forthcoming Period 1 (P1) Review on April 19. During the individual presentations, Marcelo Milrad and Chronis Kynigos detailed the progress and achievements of the Exten.(D.T.)² project, Sagun Shrestha updated the Co-design of educational resources and materials and Alisa presented the progress and achievements in relation to shaping technologies. The first day of meeting ended with the historical building tour around the OU campus.



Some Exten(DT)² team members in the onsite meeting



The Exten(DT)² Team in the historical building tour

On the second day, Marianthi Grizioti presented how project technologies will be used during the implementation in year 2 and detailed the activity plans and status of school interventions, Sofia Papavlasopoulou presented the updates related to the framework used in the Exten.(D.T.)² project, Carina Girvan and Christina Gkreka detailed the plan for data collection activities and data analysis and presentation schedule, Katrien Strubbe discussed the current status of professional development element in the Exten.(D.T.)² project and Sagun Shrestha and Christothea Herodotou presented the dissemination and exploitation plan to scale up the project activities in year 3.

Review Meeting at UCL

The Exten.(D.T.)² review meeting took place in the Knowledge Lab at the University College London (UCL) on the 19th of April, 2024. The expert reviewers from European Commission to review the project were Davinia Hernandez-Leo and Markus Vincze. In the review meeting, each project partner associated with the designated work package presented the updates related to their work packages. The expert reviewers concluded that the project is progressing very well, there are no high associated risks that can potentially impact the project, and they also acclaimed the Exten.(D.T.)² leadership and team work for a well-organised management and delivery.



Sofia Papavlasopoulou presenting the Deliverable 2 at the review meeting

Intervention in Year 2

The second cycle of school interventions (N=22) has already commenced, marking another significant milestone in the Exten.(D.T.)² journey. With more than ten interventions completed and another ten in progress, it is witnessing an inspiring wave of innovation unfolding. More than 600 students in 20 schools from diverse backgrounds, representing a multitude of countries (Greece, Belgium, UK, Norway, Sweden and Ireland) and levels (primary and secondary) are actively working on innovative design thinking projects involving a variety of tasks using emerging technologies, such as designing and printing 3D usable models, developing interactive or geo-location-based games and programming robot simulations for their communities. The interventions were based on the process of co-designing activity plans between teachers and researchers and included topics of interest such as cyber security, sustainable mobility and transport, entrepreneurship, environmental issues and sustainable clothing and nutrition. We are presenting you a brief details of the intervention taking place in the UK and Sweden below.

Intervention in the UK

Currently, two teachers --biology (N=1) and physics (N=1)-- in the school at Swansea are implementing the Exten.(D.T.)² project with the Year 7 and year 8 pupils (N= 40). Year 8 pupils are getting involved in the recycling project whereas Year 7 are exploring types of forces. For this project, In the biology sessions, Year 8 factored in the recycling issue which relates to the school, thus, they are going beyond a set school curriculum and aiming to contribute at the school level by developing some digital artefacts that can help raise awareness of recycling. While the physics teacher associated a design thinking activity with her physics curriculum. A biology teacher is implementing DT project in two Year 8 classes. The majority of groups in both Year 7 and 8 classes are using SorBET as a tool to develop a digital artefact.

Kick-off at Linnaeus University with Thorén Framtid

In early April, intensive efforts began in collaboration with a team of high school teachers from Thorén Framtid school in Växjö. Over the course of two weeks, a number of workshops took place with teachers working together with LNU's project team to plan interventions in the classrooms.

Kick-off with students

The start of students' work with Exten.(D.T.)² took place on April 24. Three classes with a total of 72 students visited Linnaeus University. For many, this was their first time at the university, and after being warmly welcomed, the LNU project team introduced themselves and Dr Juan Velasquez, a senior lecturer at LNU and expert in design thinking explained how he had used the design thinking method in a water-saving project, 'Valuing Water'. The students found the concept both interesting and somewhat challenging. It was then time for the students to try it out for themselves, and they were introduced to a game developed with ChoiCo, one of the digital tools LNU will use in its school interventions. The day ended with a fun Wooclap quiz focusing on the day's activities. This successful introduction is to be followed up with a further eight meetings for all three classes.



Students from Thorén Framtid School

Co-Designing Learning Analytics Dashboard

Marking a significant step in educator involvement, the first phase of teacher co-designing the learning analytics (LA) and its adaptive feedback feature for learner input is complete. Facilitated by Simple & NKUA, three workshops (1 online and 2 in-person) engaged 11 Greek teachers, echoing our commitment to involving educators throughout the project. Initially it is planned to engage 10-15 teachers, which will reach 200 by year 3. Inspired by research on open environment learning analytics, the workshops leveraged the Repertory Grid Technique to gather in-depth feedback on student interactions with exploratory learning tools, particularly those fostering 21st-century skills. This feedback, focused on three core project technologies (Malt2, ChoiCo and SorBET), informs the design and testing of the LA and its adaptive feedback. These teacher insights, alongside future student input, will form a comprehensive design for customizable learning analytics dashboard with tool-specific learner interaction indicators.



Filothei Chalvatza running the LA codesigning workshop

Presentation by Sagun in the Horizon Europe Insight Day

On the 13th of March, 2024, for the invited talk, Sagun Shrestha presented an overview of the Exten.(D.T.)2 project, the project outcomes achieved so far and his experiences of getting engaged in this project during the 'Culture, Creativity and Inclusive Society' session in the Horizon Europe Insights Day organised by the Innovate UK at the University of Birmingham. This event was attended by UK academics, project managers and funders.



Sagun Shrestha in the Horizon Europe Insight Day