

Extending Design Thinking with Emerging Digital Technologies Newsletter

May, 2024

Onsite Meeting at the Open University

A two-day on-site meeting was held at the Open University, Milton Keynes, UK on 17-18 April, 2024. This meeting was attended by 20 project members. On the first day of the meeting, Eileen Scanlon welcomed everyone to the fourth in-person project meeting and gave a brief history of the Open University, which has been open to adult learners regardless of their prior qualifications or disabilities since 1971. The first day focused on the presentations for the forthcoming mid-term project review at UCL with the EC and its expert reviewers. Marcelo Milrad and Chronis Kynigos detailed the progress and achievements of the Exten.(D.T.)² project, Sagun Shrestha gave an update about the co-design of educational resources and materials and Alisa Lincke presented progress in relation to shaping technologies. The first day of the meeting ended with a historical building tour around the Open University campus.



Exten.(D.T.)² team members at the Open University, on-site meeting



The Exten.(D.T.)² Team in the historical building tour

On the second day Marianthi Grizioti presented how project technologies will be used during the second year of the project and detailed the activity plans and status of school interventions. Sofia Papavlasopoulou presented 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. Katrien Strubbe discussed the current status of professional development activities. Sagun Shrestha and Christothea Herodotou presented the dissemination and exploitation plan and how to scale up project activities in the final year of the project.

External Review Meeting at UCL

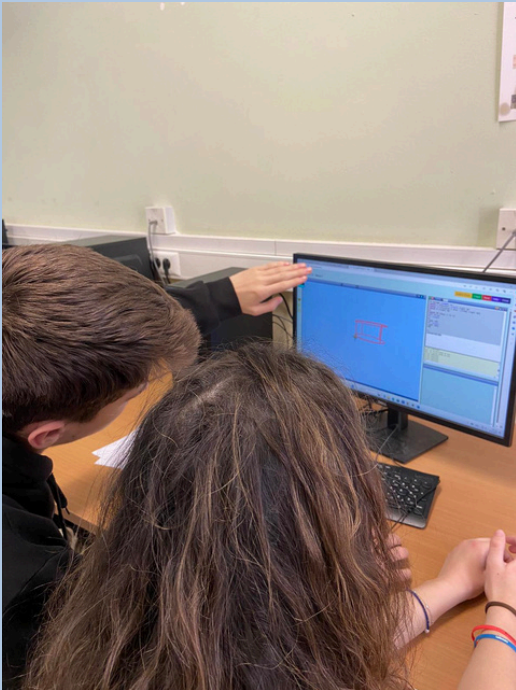
The Exten.(D.T.)² mid-term review meeting took place at University College London (UCL) on 19 April, 2024 with work package leaders presenting the progress related to their work to two expert reviewers from the European Commission. At the close of the meeting the expert reviewers provided positive initial feedback stating that the project was progressing well, and that the work reported, presented and being delivered, reflected well-organised teamwork and project management.



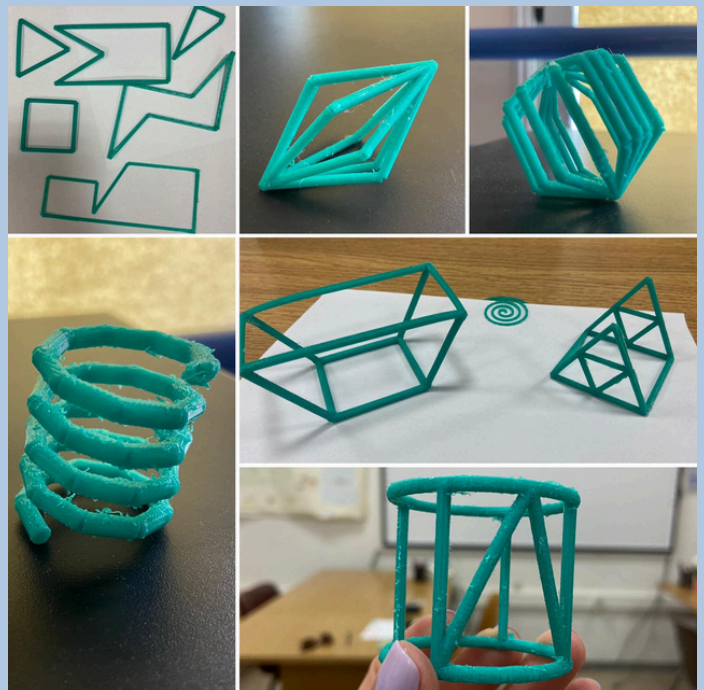
Sofia Papavlasopoulou (NTNU) presenting the Exten.(D.T.)² Framework at the mid-term Project Review at UCL

Interventions in the second year of the project

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, an inspiring wave of innovation unfolds. More than 600 students from diverse backgrounds at 20 schools, 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 using emerging technologies, such as designing and printing 3D usable models, developing interactive or geo-location-based games and programming robot simulations. The interventions are focused on topics such as cyber security, sustainable mobility and transport, entrepreneurship, environmental issues and sustainable clothing and nutrition. You can find more details about the Norway, UK and Sweden interventions below.



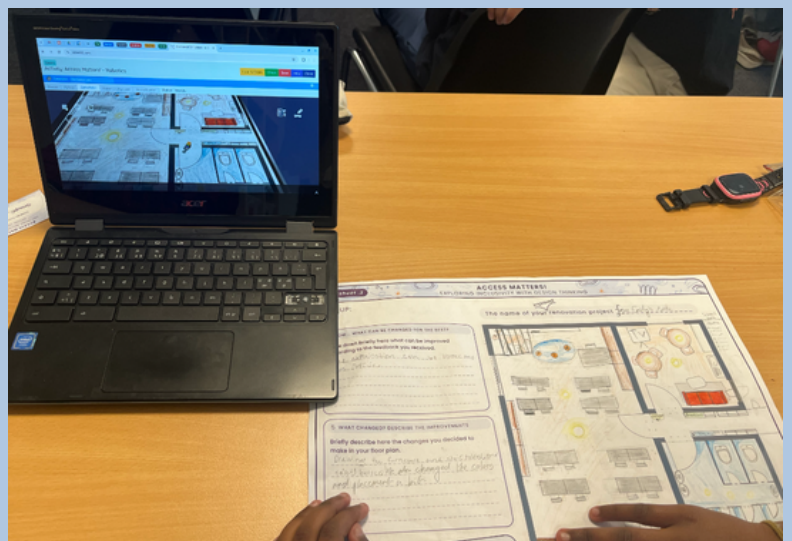
Students designing a 3D model in MaLT2 in Greece



3D printed models designed by students in Greece

Interventions in Norway

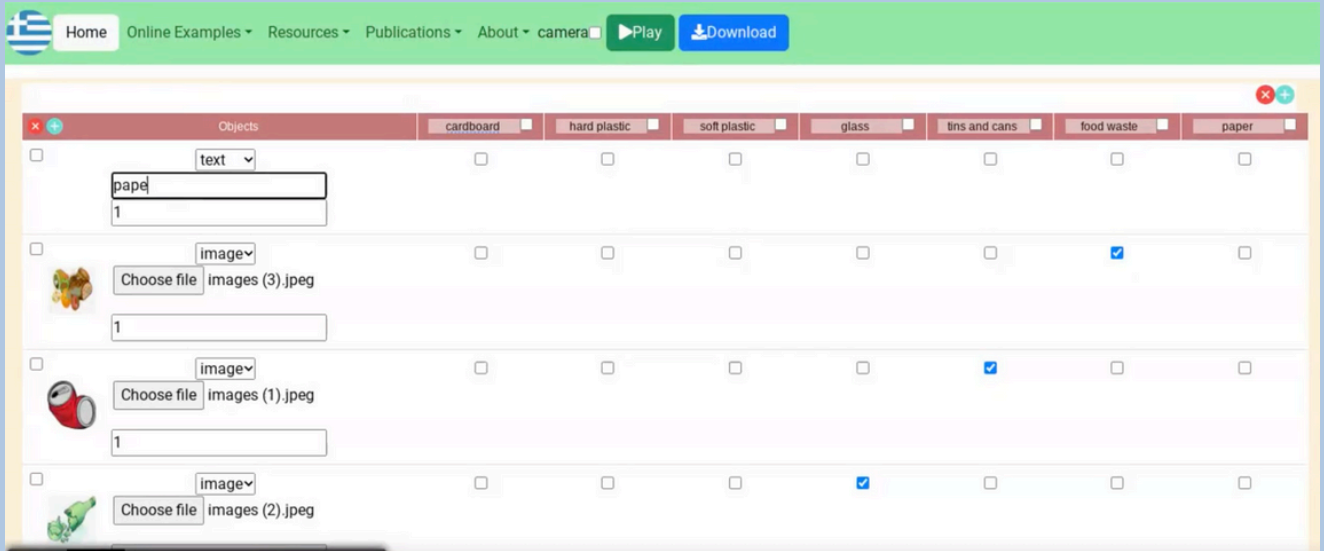
Students and teachers from five different schools in Norway have been engaged in design thinking activities using the Exten.(D.T.)² platform (<https://extendt2.com/>). More than 100 students, from Grade 6 to 9 have so far participated in the activities, creating design thinking projects around the topics of recycling, inclusivity and artificial intelligence using SorBET and GearsBot (<https://extendt2.com/widgets/gears/>) as well as nQuire. During the process, they had the opportunity to construct meaningful artefacts on the given topics, reflecting their perspective and sharing their creations. Both teachers and students described their experience as fun, challenging and something they would like to do again in the future.



A student using GearsBot in Norway

Interventions in the UK

A biology teacher and a physics teacher at a school in Swansea are implementing a design thinking project with Year 7 and 8 pupils (N= 40). Year 8 pupils are examining a recycling project and Year 7 students are exploring types of forces. Year 8 students selected recycling as an issue of relevance to their school and aim to create digital artefacts that can raise awareness of recycling amongst their peers. The majority of students in both classes are using SorBET as a tool to develop a digital artefact (<https://extendt2.com/widgets/sorbet/>) and nQuire for students to collect data (<https://learn.nquire.org.uk>).



A group of students developing a game in SorBET in the UK



Students from Thorén Framtid School visiting Linnaeus University in Sweden

Interventions in Sweden

In April 2024, intensive efforts began in collaboration with a team of high school teachers from Thorén Framtid school in Växjö to develop design thinking projects. Over the course of two weeks, a number of workshops took place with teachers to plan interventions for their classes. The start of students' work with Exten.(D.T.)² took place on April 24 with a Kick-off workshop at Linnaeus University, Sweden involving three classes with a total of 72 students. Dr Juan Velasquez, a senior lecturer and expert in design thinking explained how he had used the design thinking method in a water-saving project about 'Valuing Water'. The students found the concept both interesting and somewhat challenging. Students were asked to try it out themselves, and also use a game developed with ChoiCo (<https://extendt2.com/widgets/choico/>), one of the digital tools Linnaeus University will use in its school interventions.

The day ended with a Wooclap quiz focusing on the day's activities. This successful introduction will be followed up by another eight meetings.

Co-designing Learning Analytics Dashboard for Design Thinking Project

Facilitated by Simple and NKUA in Greece, three workshops have so far engaged 11 teachers in the process of co-designing a learning analytics dashboard for the project. The dashboard will be used by at least 200 teachers by the end of the project. 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. Valuable feedback was received which focused on three core project technologies (MaLT2, ChoiCo and SorBET). These teacher insights, alongside future student input, will feed into shaping the design of an adaptive learning analytics dashboard, featuring tool-specific learner interaction indicators.



Filothei Chalvatza (Simple) running a learning analytics co-design workshop

Participation at the Horizon Europe Insights Day

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



Sagun Shrestha (OU) at the Horizon Europe Insight Day, organised by Innovate UK