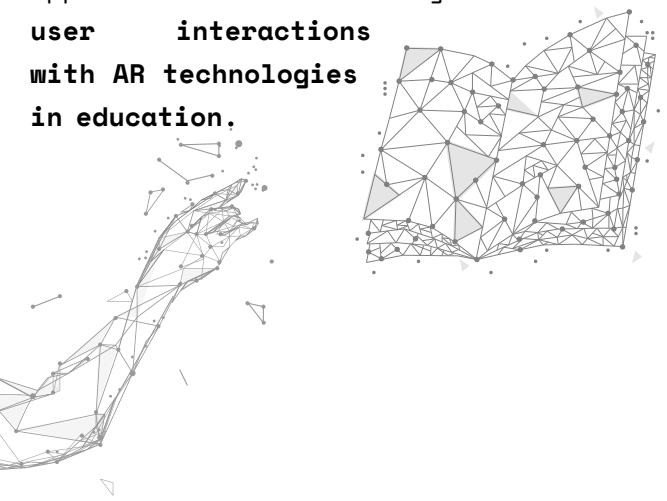


From four pilot studies, ARETE collects baseline data in terms of user needs and education practices to inform the pedagogical content of the ARETE toolkit.

ARETE aims to

- **develop, integrate and disseminate** interactive technology via AR methods and tools to create and connect existing digital systems, and to build a pan-European competitive ecosystem that supports fast dissemination of augmented learning content to a wide audience.
- **strengthen the research and industrial capacities** in Europe to develop future interactive devices and content for education.
- support the existing effort to seek opportunities offered by **multi-user interactions with AR technologies in education.**



Partners



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For an Augmented Reality Enhanced Teaching Experience

Augmented Reality (AR) is at the forefront of the debate on how to improve education with the use of new technologies. As Europe is set to become a global leader in VR and AR, Augmented Reality is considered to be one of the candidates for the education of the future.

ARETE in Education

ARETE enables different stakeholders to use the AR technology with ease and positive experience for meeting their educational needs, preferences and goals. Methodologically, it will adopt the well-established Human-centred Design (HcD) and User Experience (UX) methods in the field of Human-Computer Interaction (HCI) and adapt them for addressing the particularities of AR.

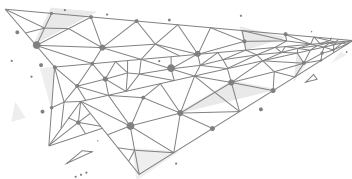


ARETE Pilots

Over four different primary school education pilots, ARETE aims to enable disruptive innovation of AR for interactions, access, and distribution of content to enhance European innovation in the field of education.

Pilot 1: Using Augmented Reality to facilitate teaching English literacy skills

Pilot 1 redevelops an existing WordsWorthLearning (WWL) digital programme into an app containing Augmented Reality (AR) - to facilitate teaching English language reading and spelling skills to struggling students. The aim is to utilise AR based teaching and learning technologies to make both teaching and learning of the English language more accessible and successful for those teachers and students engaged in the process.



Pilot 2: Augmented Reality as an Efficient Tool for STEM Information Retention

The second Pilot focuses on the innovative and exciting way of learning geometry and geography through visualisation and interaction

of Augmented Reality applications. By understanding and engaging with abstract objects, pupils have the opportunity to develop both their spatial and visual cognition while learning through critical thinking. Pilot 2 is based on the CleverBooks app, which provides STEM-oriented global curriculum-based teaching and learning solutions for primary education.

Pilot 3: Augmented Reality for promoting behaviour management and self-management

Pilot 3 focuses on the development of AR solutions to be embedded within the context of the framework of Positive Behaviour Interventions & Support, an intervention model that actively supports the implementation of Evidence-Based Practices for classroom and school discipline.

The pilot is expected to be delivered to more than 500 students across Italy and the Netherlands.

Pilot 4: Teaching with eXtended Reality – Evaluating the MirageXR Authoring Tool

With Pilot 4, we seek to evaluate the state of development of the authoring tool and viewer, and assess critically, both quantitatively and qualitatively in what ways and how well the tool ecosystem supports teachers in designing specific XR-enabled tasks and associated XR learning experiences that support their students to learn.



The ARETE consortium