

## Background

As a consequence of the digital transformation, the development of the so-called 21st century skills is crucial for the participation in a rapid changing world and job market. Computational Thinking (CT) as one of those skills is a way of approaching problems with strategies and thoughts similar to those applied by a computer scientist.

## Need

The availability of specialized information technology varies considerably and thus often prevents the teaching of digital skills. Also, the socioeconomic status is unfortunately a strong predictor for Computational Thinking skills and indicates towards the existence of a so-called digital divide.

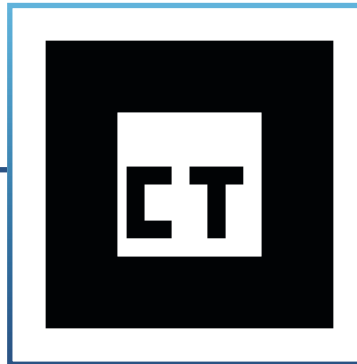
## Impact

The <colette/> project provides educators with a low-threshold approach using the Bring-Your-Own-Device approach to embed the teaching of Computational Thinking in their classes. Thus, more students can engage in and learn about Computational Thinking all over Europe.

## Take a peek



1. Scan QR Code



2. Scan Marker

## Contact

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# <colette/>

## Computational Thinking Learning Environment for Teachers in Europe

A 21<sup>st</sup> Century skill in Education



## Intellectual Outputs within the project are...



An interactive [web portal](#) which provides authoring tools to easily modify exemplary tasks. The tasks can be adapted by the teachers and put together in task sequences catering to the learners' individual abilities.



An [app for mobile devices](#) in which the students can work on tasks assigned to them by their teacher and in which they can submit their solutions. It will be possible to create and run algorithms as well as to use Augmented Reality.



A catalogue of [generic tasks](#), i.e. a collection of best-practice and sample tasks that can be used to foster Computational Thinking. These tasks will target different ages and ability levels and there will be content to use in lower as well as in upper secondary school.



A [manual](#) introducing the concept of Computational Thinking and explaining educators how to use and embed [COLETTE](#) in their classrooms which helps teachers to learn about the basic functionalities on their own.

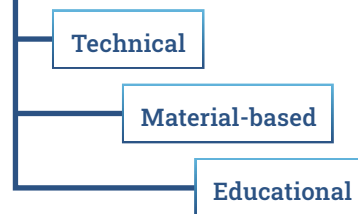


A modularized short-term [curriculum for teacher trainings](#) in which educators get familiar with the concept of Computational Thinking and [COLETTE](#).

## Results

At the end of the three-year lasting strategic partnership, we will provide European teachers with a holistic concept of how Computational Thinking can be taught.

The two-component low-threshold learning environment, set of generic tasks, handbook and short-term curriculum will support teachers on three different levels:



## Consortium

The consortium consists of six partners from five different European countries:

[Goethe University Frankfurt am Main](#) | GER  
Project Coordinator, web portal, manual for teachers

[Autentek GmbH](#) | GER  
App-based learning environment

[Johannes Kepler University Linz](#) | AUT  
Dissemination

[Univerzita Konstantina Filozofa Nitre](#) | SVK  
Generic Tasks for lower secondary level

[Utrecht University](#) | NL  
Generic Tasks for upper secondary level

[Université Claude Bernard Lyon 1](#) | FR  
Short-Term Curriculum

