

During the TeaEdu4CT project, the Moodle platform was used to develop MOOC courses. A 6-courses MOOC was prepared and opened to all prospective teachers on the servers of Ankara University in order to make national dissemination of the outputs (modules) of TeaEdu4CT project permanent and available to learners. While the offered courses support prospective teachers in the preparation of basic STEM subjects and non-computer activities, they also include the lessons prepared for the modules O3 and O7.

The URL of the website is tech.ankara.edu.tr



The prepared courses on MOOC was packed separately so they can be used within Moodle LMSs worldwide. [All six MOOCs courses can be downloaded from here.](#)

MOOC Modules

1. What is Computational Thinking? What is not?

Computational Thinking (CT) aims to provide students with critical thinking, reasoning, problem solving, digital competence and creativity skills, especially in this time of change in teaching and learning processes. CT skills can be gained in the classroom through computer technologies or unplugged activities. The aim of this online course is to support the teachers to develop CT skills of students.

2. Computational Thinking from Theory to Practice

CT processes include abstraction, decomposition, pattern recognition, algorithm design, modeling, automation and evaluation dimensions. In this course, computational thinking dimensions are explained together with in-class practices.

3. CS Unplugged Activities

CS Unplugged activities are defined as activities that teach Computer Science concepts and processes through cards, strings, crayons, engaging games and puzzles. When teaching coding to young students, unplugged activities should be used first, as they are more suitable for the developmental characteristics of this age, contain concrete applications and teach basic coding concepts in a fun, motivating and understandable way. This online course provides unplugged activity samples to be used in early childhood level.

4. Interdisciplinary Teaching of Computational Thinking

This module allows teachers to;

- Equip with the necessary knowledge and skills to teach CT,
- To have an idea about pedagogical approaches, tools and assessment strategies while teaching CT
- Learn how to prepare teaching plans, materials and activities while integrating CT into the educational process.

5. Computational Thinking for Language Teaching

The aim of this course is to allow teachers to incorporate CT skills into language teaching subjects. To this end, each subject teacher in primary school is expected to:

- Gaining the necessary knowledge and skills to teach CT;
- To understand pedagogical approaches, tools and assessment strategies when teaching CT;
- To learn how to prepare teaching plans, materials and activities while integrating CT into the educational process.

6. Computational Thinking for Social Sciences

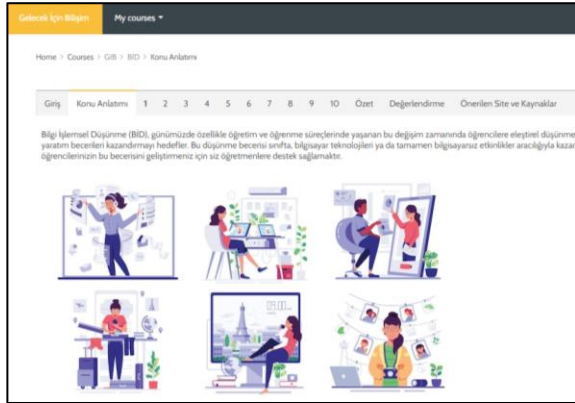
This course aims to allow teachers to incorporate CT skills into social subjects. Teachers expected to:

- Gaining the necessary knowledge and skills to teach CT;
- To understand pedagogical approaches, tools and assessment strategies when teaching CT;
- To learn how to prepare teaching plans, materials and activities while integrating CT into the educational process.

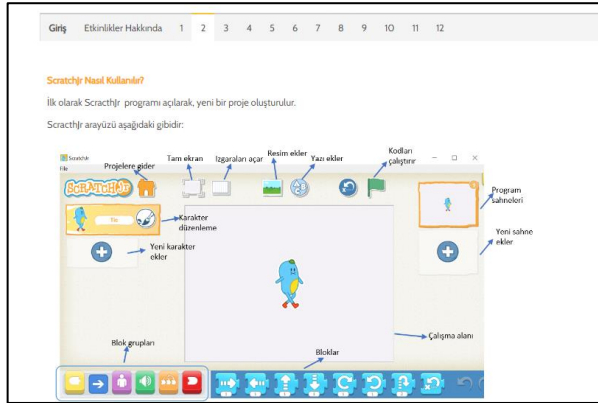
Content of Modules

Each module consists of introduction, content, summary, assessment, and resources sections. In each module, there are textual and visual content to introduce topics, topic-related activity

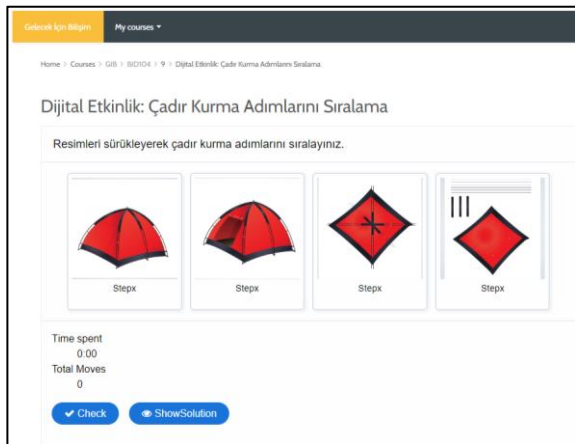
samples, summary about the topics, an assesment activity including multiple-choice questions. The courses include interactive content prepared with H5P, videos, and links to different internet resources. In addition, some modules involves additional instructional materials such as presentation files, videos, songs, work-sheet files, etc.



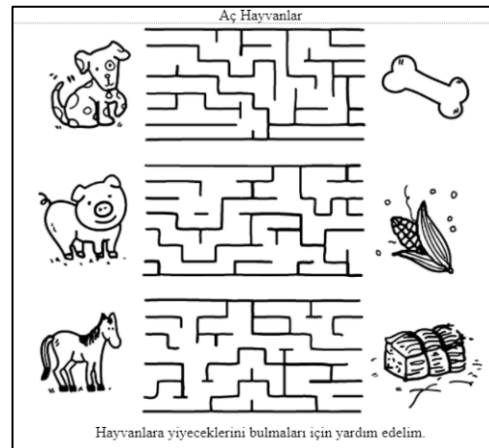
Sample content



Sample content



Sample interactive activity



Sample worksheet