Coding in STEM Education

Teaching materials available from 1 March 2019

What does a robot have to do with environmental protection? How do you remote control a model ship using a smartphone? How can you program a pet? IT is everywhere and coding offers many possibilities for exciting and relevant lessons.

Organised by Science on Stage Germany and with support from SAP SE, 23 teachers from seven European countries developed concrete examples and practical advice about how to acquire coding skills using microcontrollers such as Arduino and Raspberry Pi not only in computer science lessons but also in subjects such as biology, chemistry, technology, mathematics and physics.

Benefit from the know-how of your colleagues!

‹Teaching materials› Available for free online and in print from info@science-on-stage.eu

‹Dissemination/sustainability› Teacher trainings across Europe + Code League, a competition for students and teachers in 2019/20. Support for material costs possible!

‹Science on Stage› is a European network from teachers for teachers to promote STEM education.

‹Contact & further information› Science on Stage Europe · Am Borsigturm 15 · 13507 Berlin
Tel +49 30 400067-40 · info@science-on-stage.eu
www.science-on-stage.eu/coding

A PROJECT BY

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CODE
LEAGUE
<Coding in STEM>

<What to do>

Science on Stage is looking for innovative coding projects for STEM lessons in primary and secondary schools using digital tools such as microcontrollers (Arduino, Raspberry Pi, Calliope, etc.) and/or various programming environments and languages (Snap!, Scratch, C++, etc.) in the following categories:

↳ Fundamental Science in 1's and 0's
↳ Microcontrolling the World
↳ Environment 4.0

The results should be documented as report, video presentation, online simulation, homepage or any other appealing form.

For inspiration, use the booklet "Coding in STEM Education"!
www.science-on-stage.eu/coding

<Enter>

<exe> Develop your project with your students and send the documentation by 1 April 2020 to info@science-on-stage.eu **<output>** A jury will select the best 10 teams (3 students and 2 teachers per team) who are invited to present their results at a final event in autumn 2020.

<Who can take part>

European STEM teachers (Computer Science, Technology, Engineering and Mathematics) for secondary and primary school and their students

<Material support>

Science on Stage offers financial support for e.g. microcontrollers and other hardware for up to 150 €. Please get in touch with us via email to info@science-on-stage.eu.

<Criteria>

Creativity, involvement of students, content and presentation of results

<Prizes>

↳ Participation in the European Science on Stage Festival 2021 for teachers
↳ Surprise for students

<Contact and further information>

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