Jan Günther
Maria Hellmann
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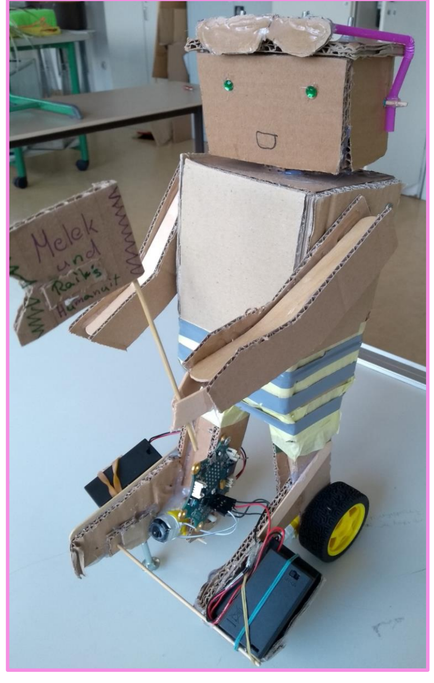
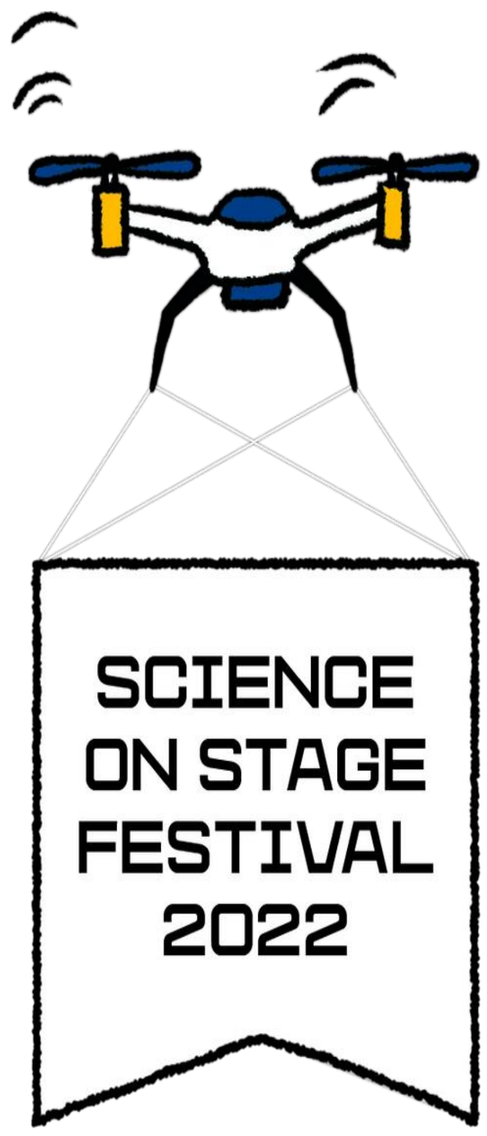
STEM WITH ARTS

Ernst-Göbel-Schule Höchst Germany



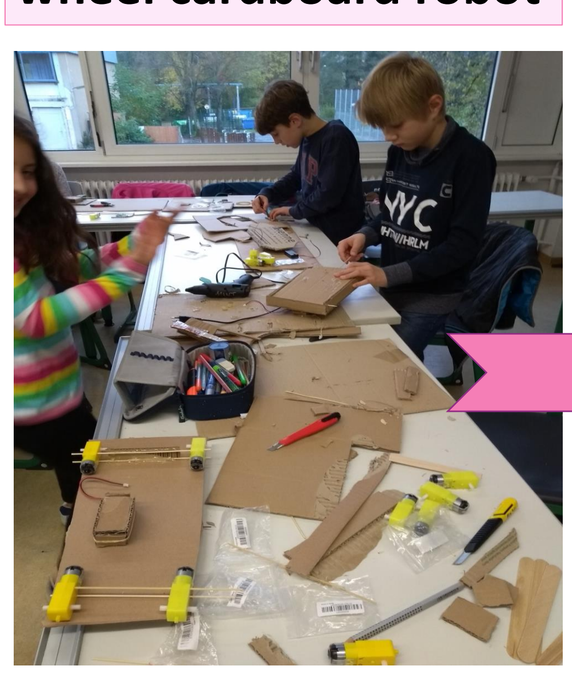
Create and code your own artful cardboard robot

The students can create and code their own cardboard-bots with the help of the Calliope mini (a single-board computer). The students are highly motivated because they can express themselves creatively.
The low-cost project attracts both boys and girls.



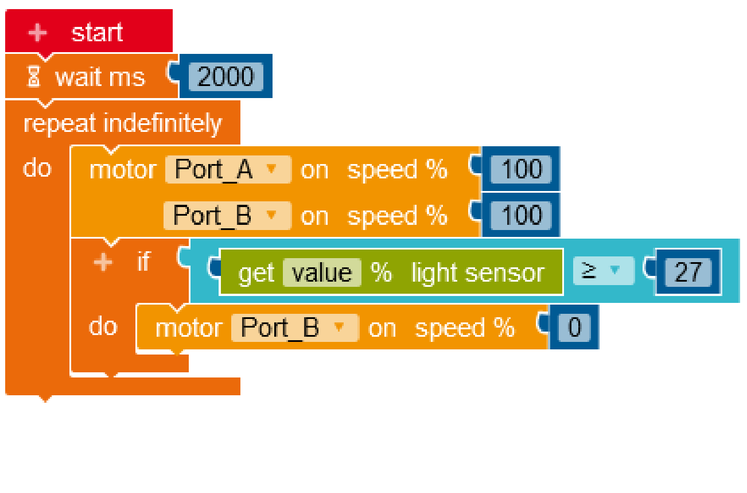
Group of learners:
16 students from all types of (secondary) school, aged 10-13
(also possible at an earlier age, probably 8)

<u>step 1:</u> build a two-wheel cardboard robot

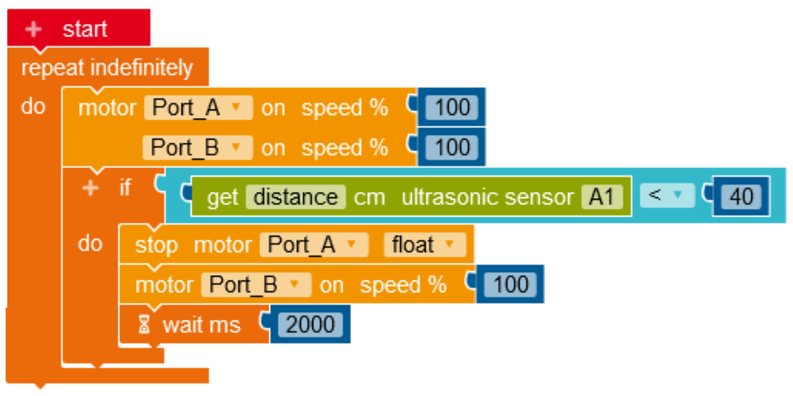


<u>step 2:</u> decorate it with different materials, using a hot glue gun

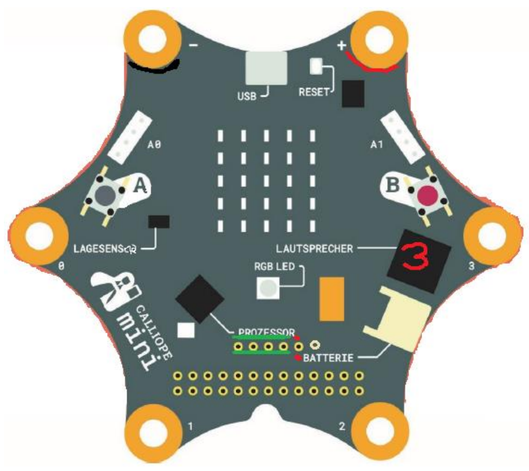
<u>step 3:</u> coding



Scratch: NEPO by
Open Roberta Lab



microcontroller
Calliope Mini



This leads to a great variety of individual, artful cardboard bots. As the materials are very cheap and easily available, students may carry out further projects at home.

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