

HOW A SMALL PUBLIC LIBRARY SUPPORTS SUSTAINABILITY THROUGH ROBOTICS COMPETITIONS

EBLIDA Annual Conference 2026

FROM CONSUMERS TO CREATORS

Hanka Šandová

 **EBLIDA** — Městská
— knihovna
Polička —

HOOK



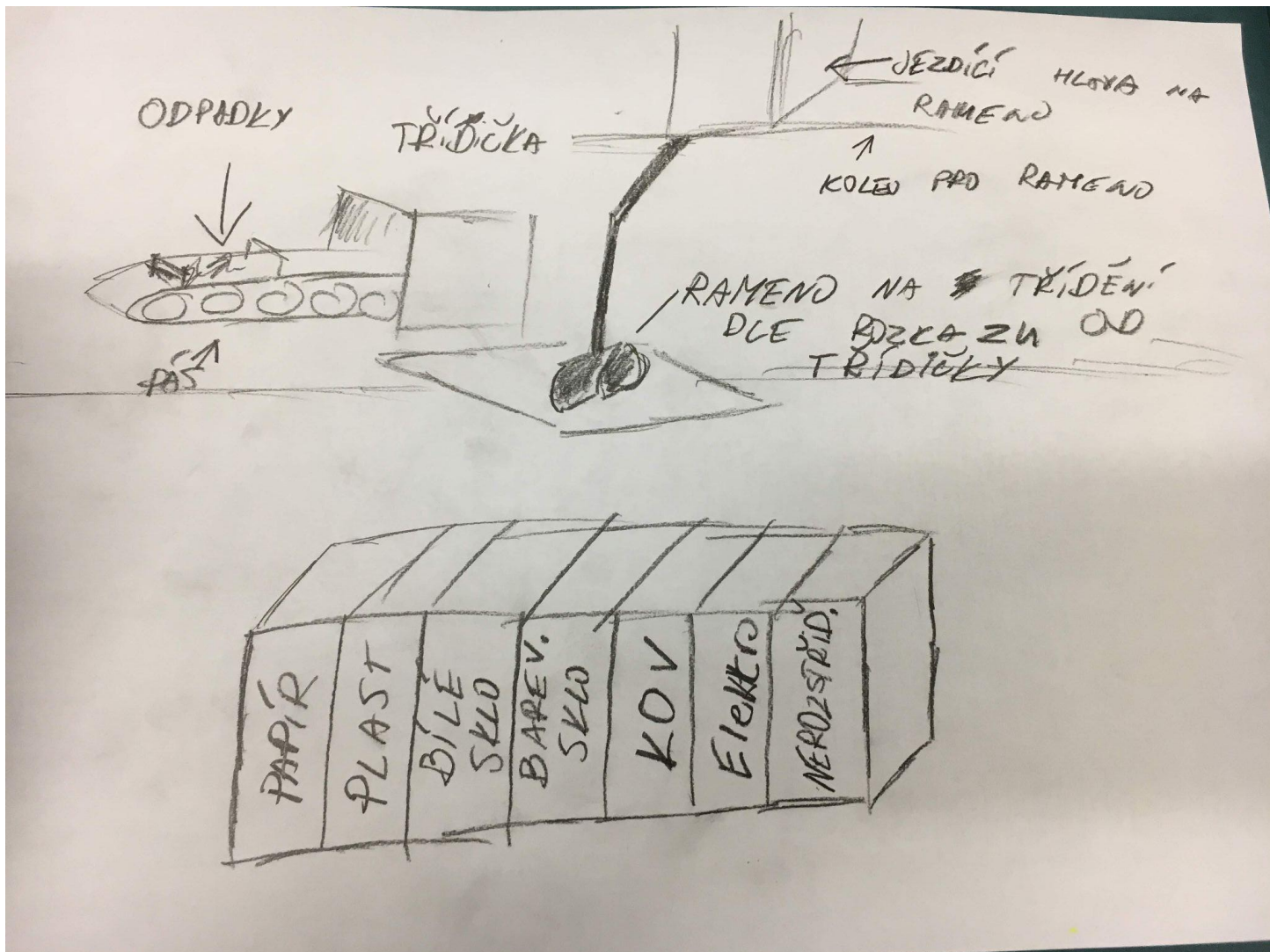
A group of kids in our library trained an AI to sort waste.
This is how we do sustainability.

WHY ROBOTICS COMPETITIONS?

Robotics competitions are not just about robots.

- solving real-world problems
- teamwork & resilience
- turning kids into creators

FROM IDEA TO SOLUTION



EXAMPLE 1 – FIRST LEGO LEAGUE 2019/2020 & AI

Season topic: [City Shaper](#) – Sustainable cities

Teaching Machines to Sort Waste

- kids trained their own AI
- not using → understanding
- from “black box” → hands-on

The Tool: Cognimates / [Teachable Machine](#).

DEMO AND PRESENTATION OF WASTE SORTING AI MODEL



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EXAMPLE 2 – FIRST LEGO LEAGUE 2024/2025 & APP CODING

Season topic: [Submerged](#) – Water protection.

Coding on the Go: The "Waste Water" Game

- created a game to teach others about water & waste
- players learn everyday sustainability
- creators learn coding & design

The Tool: [OctoStudio](#) (MIT Media Lab).

DEMO AND PRESENTATION OF WASTE WATER GAME



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OCTOSTUDIO – WATERING PLANT MINI TUTORIAL

- Simple code.
- Real-world thinking.
- Sustainability.

```
IF plant is dry → water  
ELSE → do nothing
```



WATERING PLANT MINI TUTORIAL



```
when [play] clicked
  set size to 60 %
  go to [location]

when [sprout] touches [water]
  change size by 20
```



```
when [play] clicked
  hide
  set size to 60 %
  go to [location]

when I shake
  show 100 %
  move 100 [direction]

when [water] touches [sprout]
  hide
  go to [location]
```

LIBRARY IMPACT

Even in a small library, we can:

- support every child (gifted, special needs)
- connect school & real life
- create a safe space to experiment
- connect generations

 **“We didn’t build a lab.
We started with curiosity.”**

FINAL MESSAGE

**Sustainability is not a topic.
It is a mindset.**

Makerspaces are circular.

Ideas → skills → sharing → new ideas

- Small space.
- Small budget.
- Big impact.



TÝDEN 17
S KNIHOVNAMI PRO SDGs

CONTACT

Hanka Šandová

Městská knihovna Polička

Centrum technického vzdělávání Půda

Palackého nám. 64

572 01 Polička

e-mail: sandova@knihovna.policka.org

<https://puda.knihovna.policka.org>

<https://robotika.sandofky.cz>

