

**image made with Nano Banana directly from Google Slides*

Digital and AI competences for K-12 teachers

Ana Stamatescu, 12.12.2025



Krontechies



Co-funded by
the European Union


LECTURE



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Become a member of the EDEH to:

- help shape the future of digital education in Europe
- get support and mentorship from experienced professionals
- boost your innovative ideas and projects
- stay up to date with the latest trends and best practices in education



<https://education.ec.europa.eu/focus-topics/digital-education/digital-education-hub/about-the-hub>

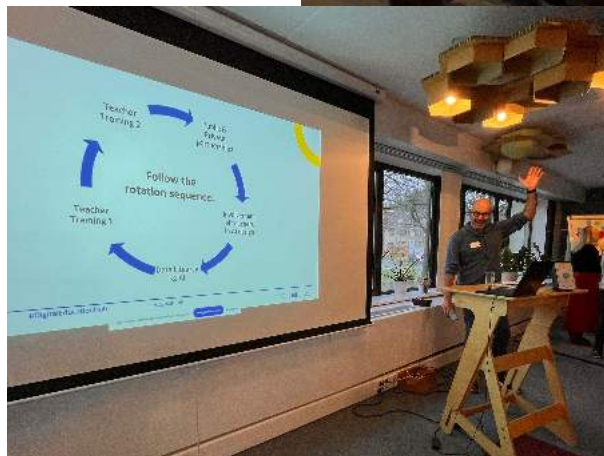




AI in Education

EDEH squad

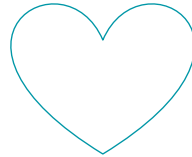
October 2025 - January 2026





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technology + nature =





**We support K-12 teachers to become catalysts
for nature protection with the help of
technology.**



3D printing



**upcycling with conductive fabric +
LilyPads (sewable microcontrollers)
+ LEDs**



micro:bit powered
smarthouses



micro:bit powered
greenhouses



RGB circuits with copper

OZOBOTS



micro:bit RANGERS



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PROPARK
PENTRU ARII PROTEJATE

Building a sustainable community powered by tech solutions



FONDUL ȘTIINȚESCU



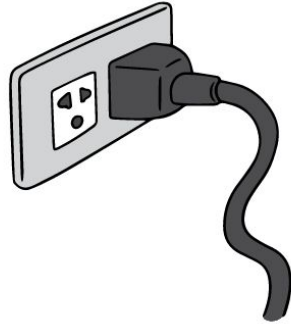
Satul
Modern
Adaptabil și
Receptibil la
Tehnologie





<https://www.youtube.com/watch?v=3HTtH7OPzAY>

Digital competences acquired plugged vs. unplugged



Conversation starter at our K-12 teachers digital trainings: **My relationship with technology/AI**



#DIXIT



Digital education without barriers with Scratch Tactile



CodeWeek
Build your digital future

Funded by the European Union

December 2, 2025

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 Scratch tactile  

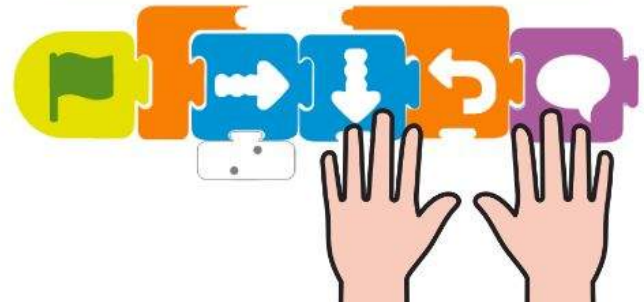




www.ScratchTactile.org



SCRATCH JR



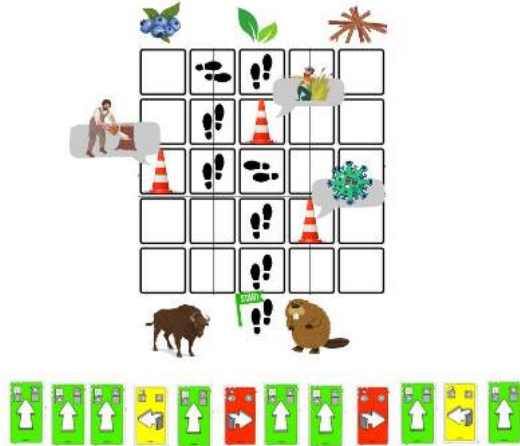


info@codeweek.eu



The screenshot displays the CodeWeek website interface. At the top, the CodeWeek logo is accompanied by navigation links: Activities, Resources, Community, Schools, About, and Blog. A search icon, a user profile icon, and a 'Register activity' button are also visible. The main content area features a large orange banner with the heading 'Educational Resources'. Below this heading, a white box contains the text 'Welcome! Here, you'll find resources to support your learning journey' and a button labeled 'Guidelines on Diversity and Inclusion'. A 'Resources' dropdown menu is open, listing various categories such as Coding@Home, Podcasts, Online Courses, Training, Learn & Teach, Presentations and Toolkits, Webinars, Girls in Digital, Careers in Digital, Matchmaking Toolkit, and Future Ready CSR. To the right of the dropdown, a 'Games & Competitions' section lists Challenges, Hackathons, Dance Challenge, Treasure Hunt, and Minecraft Education. A 'Careers in Digital' promotional card is also present, featuring an image of students and a 'See more' button. At the bottom of the page, a yellow banner asks 'Got free and open educational resources?'.

digital skills unplugged with Cody Roby



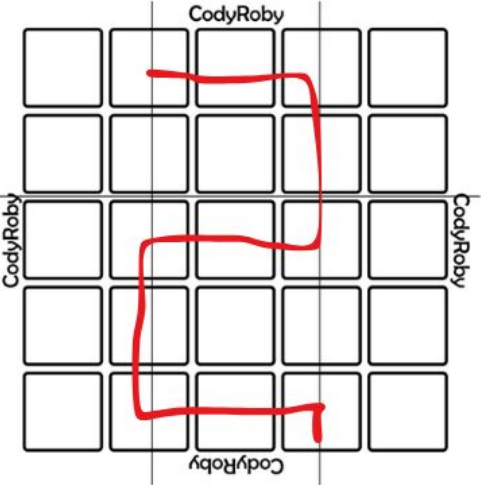
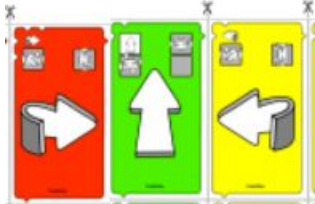


<http://www.codeweek.it/cody-roby-en/ecw-edition/>

Storytelling with Cody Roby



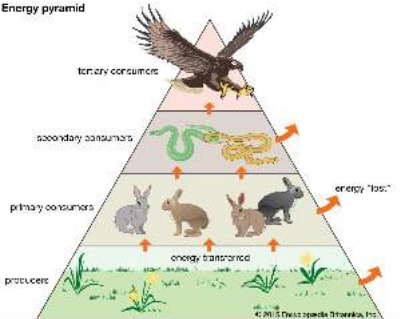
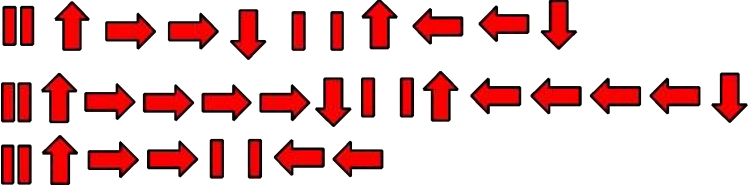
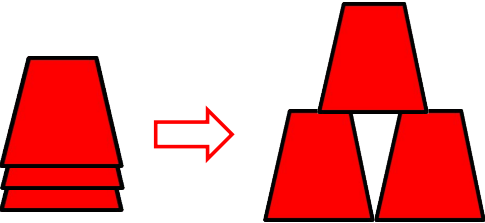
RobyPrinter



<https://codeweek.eu/resources/CodingAtHome/codyplotter-and-codyprinter>



CUP STACKING



<https://lam-programming.weebly.com/cup-stacking.html>

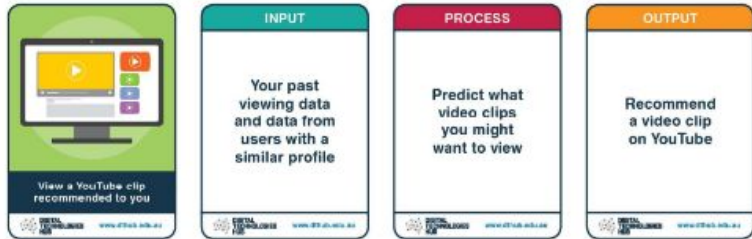
Teaching the basics of an algorithm unplugged



https://youtu.be/cDA3_5982h8?si=ta1VaiYTxka0l7Fj



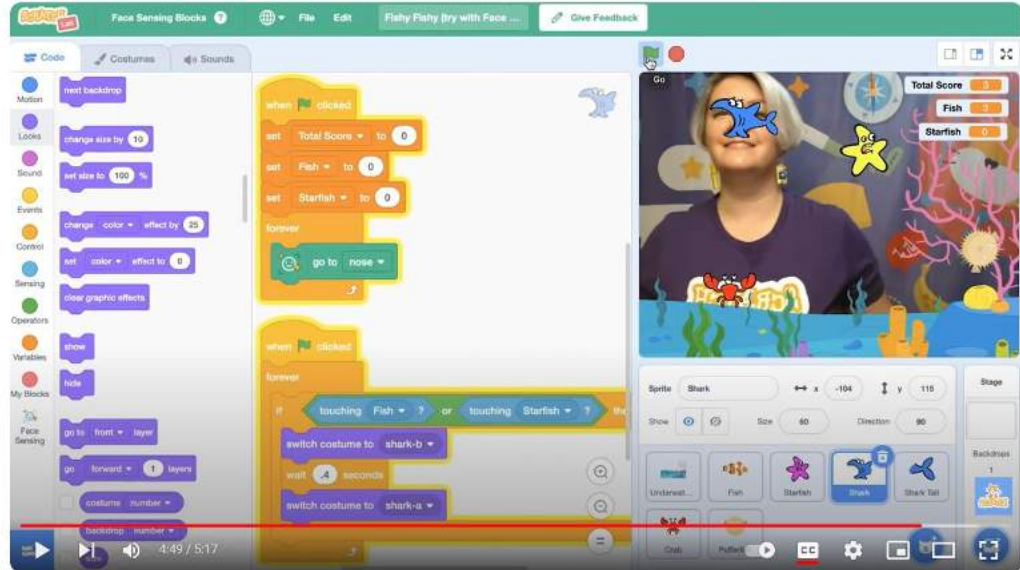
Teaching Artificial Intelligence unplugged



Artificial Intelligence... plugged



<https://lab.scratch.mit.edu/face/>



Scratch & AI: FaceSensing | Tutorial

<https://youtu.be/uLFh9Fvuj1k?si=BPAd52VSyQyMRVBJ>



Generative AI for Educators

As a teacher, we know your time is valuable and student needs are broad. With Generative AI for Educators, you'll learn how to use generative AI tools to help you save time on everyday tasks, personalize instruction, enhance lessons and activities in creative ways, and more.

[Get Started](#) ↗














- Built by AI experts at Google in collaboration with MIT RAISE
- No previous experience necessary



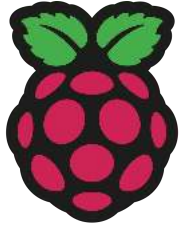
https://grow.google/intl/en_ca/ai-for-educators/



<https://www.digitall.charity/professionaldevelopment>

    <p>Getting out and about with the micro:bit</p> <p>Jan 07, 2026 - 16:00 - 17:00 Online</p>	    <p>Introduction To Iteration In Python</p> <p>8th January 2026 4-5pm</p> 	   <p>Coding for Climate Action</p> <p>8th January 2026 4-5pm</p> 
<p>Getting out and about with the micro:bit</p> <p>07 Jan 2026, 16:00 - 17:00 Online</p> <p>More info</p> <p>Book Place</p>	<p>Introduction to iteration in Python</p> <p>08 Jan 2026, 16:00 - 17:00 Online</p> <p>More info</p> <p>Book Place</p>	<p>Getting Started with Coding for Climate Action</p> <p>08 Jan 2026, 16:00 - 17:00 Online</p> <p>More info</p> <p>Book Place</p>

Free online (in EN) Profesional Development session for teachers



Raspberry Pi Foundation

<https://www.raspberrypi.org/>

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- > [Online training courses](#)
- > [Hello World magazine](#)
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- > [AI education](#)

A GLOBAL MOVEMENT

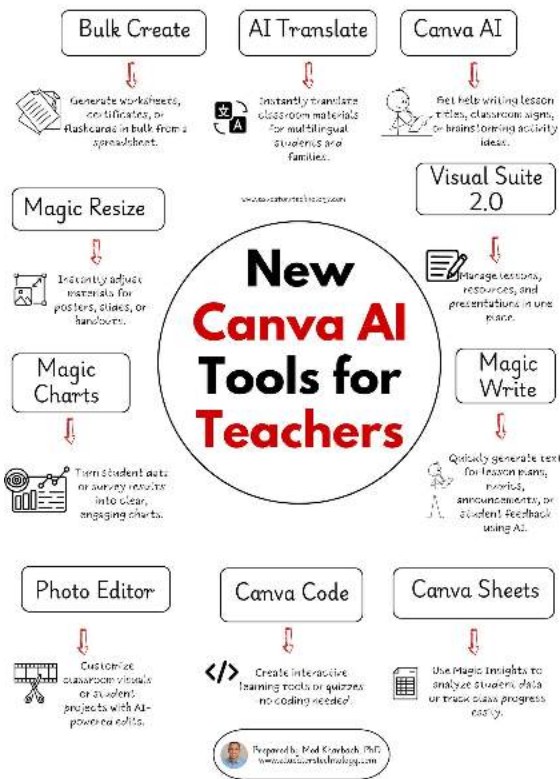
The Hour of Code is now the Hour of AI

The Hour of AI makes teaching AI literacy easy, engaging, and fun. Empower your students to become the next generation of innovators with AI.

Explore activity catalog 



<https://code.org/en-US/hour-of-ai>



15 Important Google Docs AI Features Teachers Should Know About



Enhance Your Teaching with AI 40 AI Tools for Teachers



The logo icon consists of three concentric, semi-circular arcs of varying radii, all starting from a common point on the left and curving towards the right. The arcs are solid black and have a consistent thickness.

NotebookLM



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Thank you! Questions?