

IT as a tool for teaching sustainability

M.Kalneja, 27.09.2022.

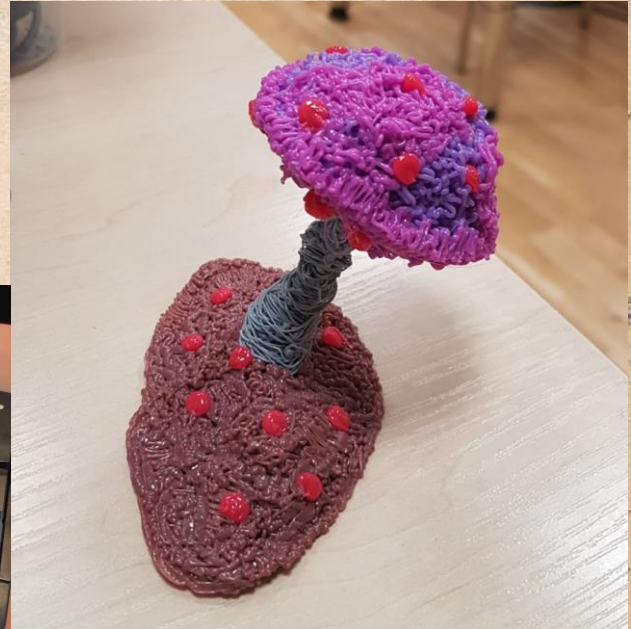


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Activities at our school

3D pen



Green Tech Hackathon



Creating Web page

Augu, dārzeņu stādīšana vai sēšana



Šajā bildē es mammai palīdzēju iestādīt puķes, šeit es apguvu kaut ko jaunu, jo nekad šādus mazos darbiņus nekad neesmu darījis.



Šeit var novērot to rezultātu.

Dabas procesu izziņāšana



Šeit esmu nobildojis agrās rudens ābeles pumpurus, tie sāk pavasarī ziedēt, vasaras vidū jau izveidojas negatavs auglis, un pie vasaras beigām, vai rudens sākuma jau ir gatavi augļi kurus var pielietot vairākas qardās maltītēs.



Lielā talka



Ko dara lielajā talkā.

Lielā talka notiek 30.aprīlī. Kustības galvenais mērķis ir apzināt cilvēku cilv ar dabu piesaistīšanu. Katrā Latvijas pilsētā cilvēkus aicina iesaistīties savas pagalmos, ielas vai palīdzēt citiem.



Talkas pirmsākumi.

- Latvijas teritorijā 15-19.gg. pastāvēja zemnieku pieejamā darba mūžnieka sacensība un talka, ko tautas sauca par kļūcām, bija zemes rentes veids.
- Latvijas teritorijā jau 1920. un 1930. gados ir notikušas talkas, kurās aktīvākie iedzīvotāji pārvērtīja apkārtnes labiekārtošanu.



Lai palīdzētu dabai, un turetu to sakoptu, pilsētas ir izvietoti speciāli šādi konteineri, atkritumu šķirotnes, kurās ir iespējams šķirot atkritumus, un atbrīvoties no tiem, tādējādi palīdzot dabai.



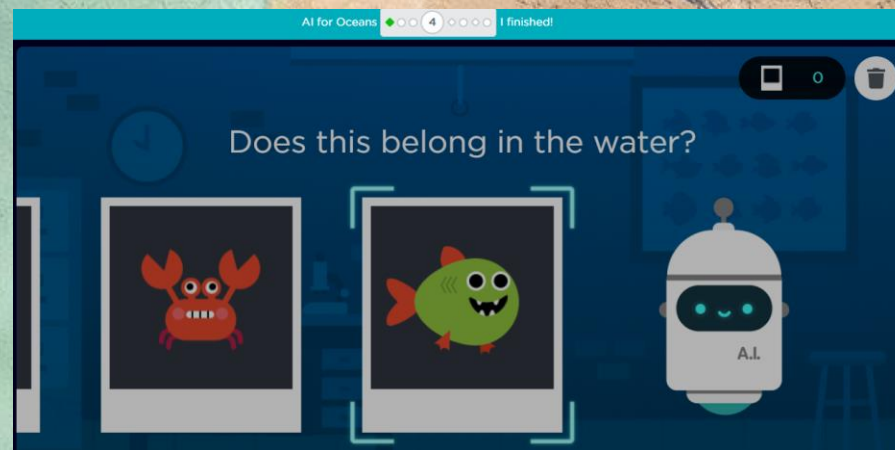
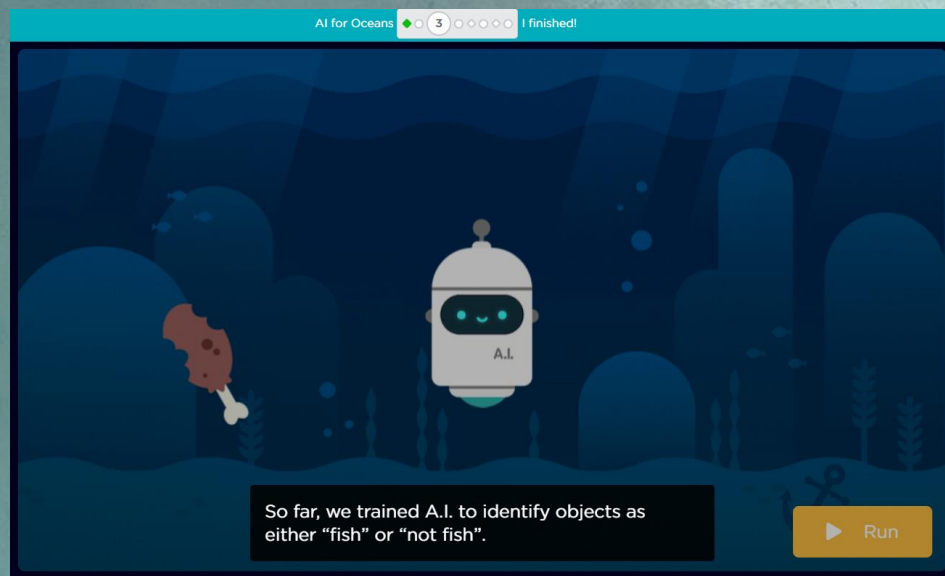
Šie bija savākti atkritumi, ko labi cilvēki, bija savākuši jūras piekrastē, lai to padarītu tīrāku, un skaistāku, un tas būtu jādara, ikvienam, lai masveidā sakoptu visas jūras piekrastes, lai dzīvajām ūdens būtnēm nerastos kaitējums un tās varētu droši dzīvot.

Code.org



Artificial Intelligence (AI) game I

Learn about artificial intelligence (AI), machine learning, training data, and bias, while exploring ethical issues and how AI can be used to address world problems.



Artificial Intelligence (AI) game II

- Garbage dumped in the water affects marine life. In this activity, you will program or train AI to identify fish or trash.
- AI for Oceans, available here <https://code.org/oceans>

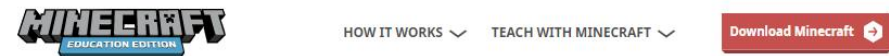
Let's clean up the ocean!

Minecraft Education Edition I

- Jump to adventure with game based learning using Minecraft Education Edition.
- There are:
 - Online courses;
 - Lesson plans;
 - Full lessons with Minecraft Worlds;
 - Educator commune.



Minecraft Education Edition



Home / Resources / Minecraft Climate & Sustainability Kit / **Climate Futures**

CLIMATE FUTURES

3 lessons

This set of lessons and worlds aligns to the UN Sustainable Development Goals (SDGs) and is intended to educate youth about climate change and how they can have an impact on improving the future.



LESSONS IN THIS COLLECTION



Lesson

CLIMATE FUTURES: THE FOREST

Explore the impact of deforestation on climate change as an investigative...

[View Lesson](#)



Lesson

CLIMATE FUTURES: THE FARM

Explore the impact of agriculture on climate change as an investigative...

[View Lesson](#)



Lesson

CLIMATE FUTURES - TRANSPORTATION

Explore the impact of transport on climate change as an investigative...

[View Lesson](#)



Lesson

EXTINCTION! ORANGUTANS FUTURE

Design and build a sustainable Orangutan reserve.

[View Lesson](#)



Lesson

EXTINCTION! BIODIVERSITY LAB

Explore biodiversity processes around the world.

[View Lesson](#)



Lesson

EXTINCTION! SAFARI

A journey through biodiversity and extinction.

[View Lesson](#)



Challenge

BEE CREATIVE!

Your challenge is to build a pollinator garden in Minecraft.

[View Challenge](#)

Challenge

GREEN BUILDING

Investigate innovations in buildings that help to save energy and protect the...

[View Challenge](#)

Challenge

ZERO WASTE

Research and document ways to reduce food waste in your home, school, and...

[View Challenge](#)

Challenge

A CASE FOR BIODIVERSITY

Biodiversity refers to the variety of life on Earth, and includes every living thin...

[View Challenge](#)

BIODIVERSITY BUILD CHALLENGE

Explore the delicate balance of ecosystems with this Student Build Challenge. Build an aquatic or terrestrial ecosystem, then remove one type of plant or animal. Rebuild the area to illustrate how the ecosystem would be affected by the extinction of one critical species. Share with the community using #MinecraftEdu!

[Start the challenge](#)



Minecraft Education Edition

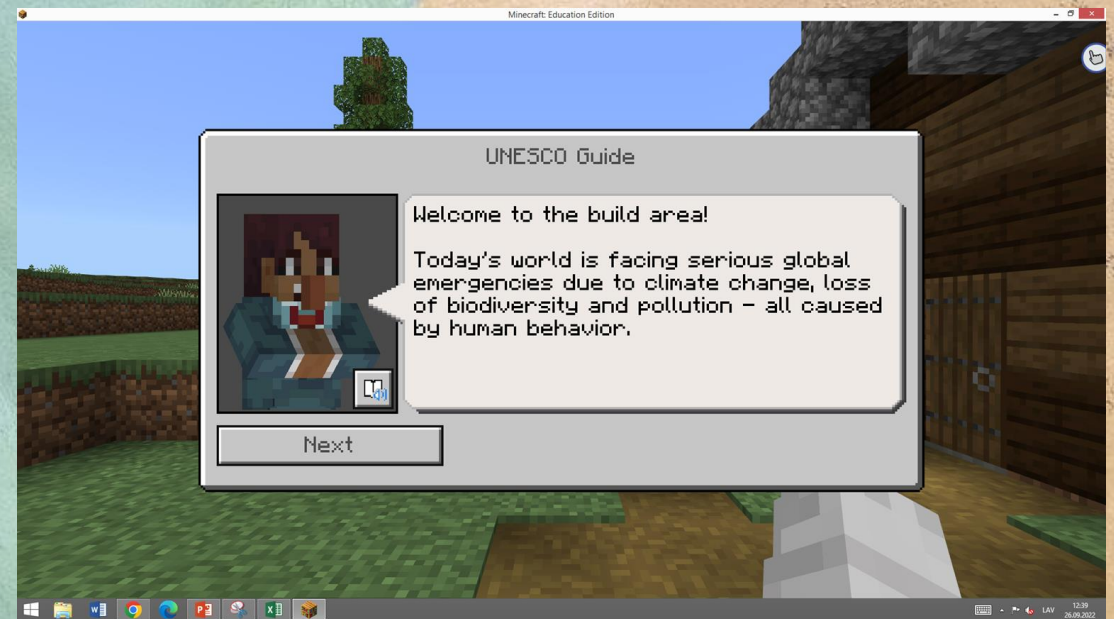


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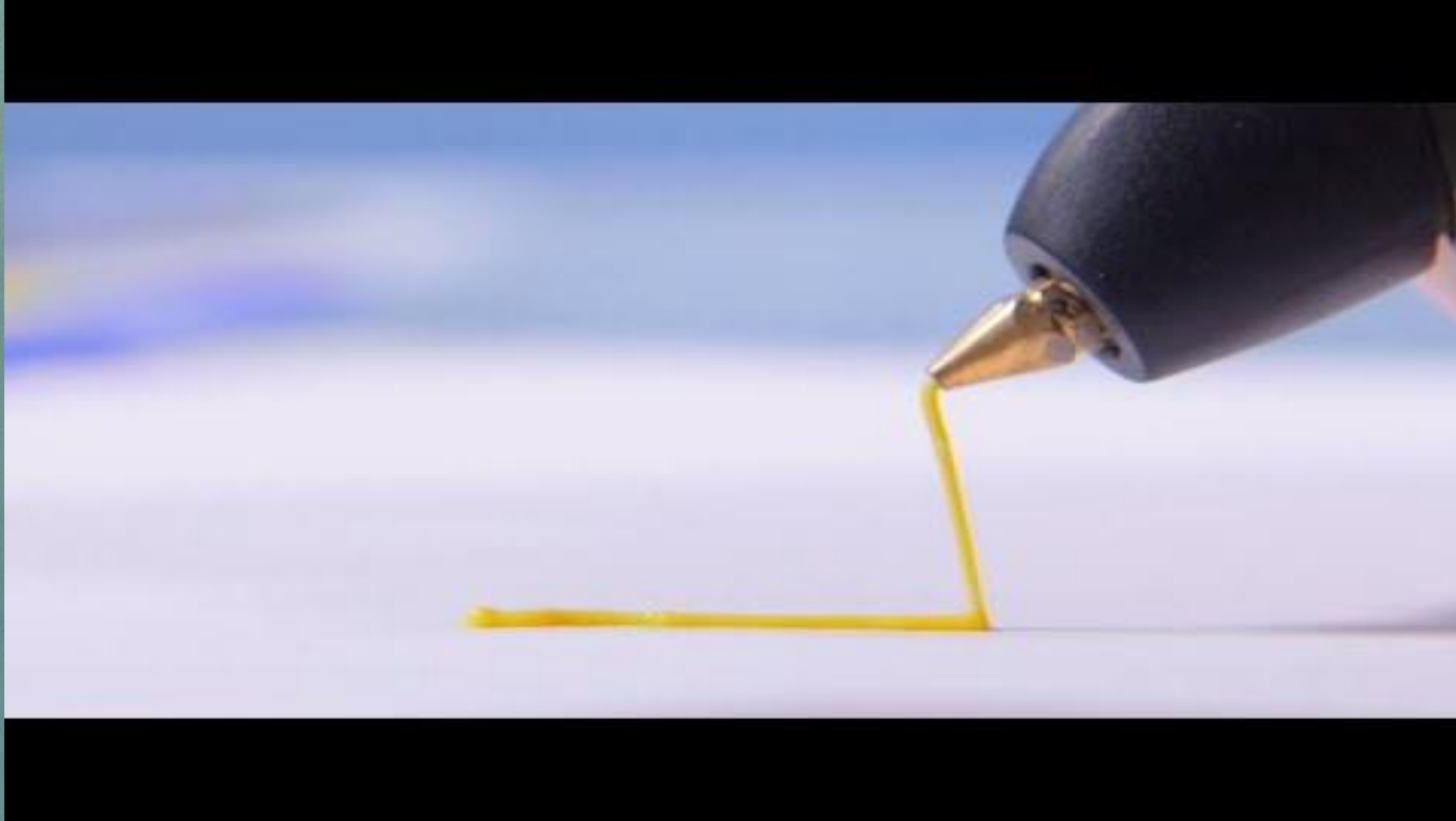


Minecraft Education Edition

- Use Minecraft Education Edition official web site
<https://education.minecraft.net/en-us/homepage>
- Go to
<https://education.minecraft.net/en-us/get-started/download>
- Download Minecraft
- Find the world and enjoy the game!



3D pen



3D pen

- To develop imagination and design thinking;
- Create 2D and 3D design;
- You can use 3D printing technology at every topic or issue.
- Web page available here <https://intl.the3doodler.com/>

Work in groups

- Create 6 groups:
 - Minecraft I;
 - Minecraft II;
 - AI I;
 - AI II;
 - 3D pen I;
 - 3D pen II.



Kiitos!

**Thank you for your
attention!**
Tack! Paldies!



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