Information Classification: CONTROLLED

making space
for sand

Building Community Resilience on a Dynamic Coast by Making Space for Sand

CoastCraft

Jolyon Sharpe: MS4S Project Lead

Department for Environment Food & Rural Affairs

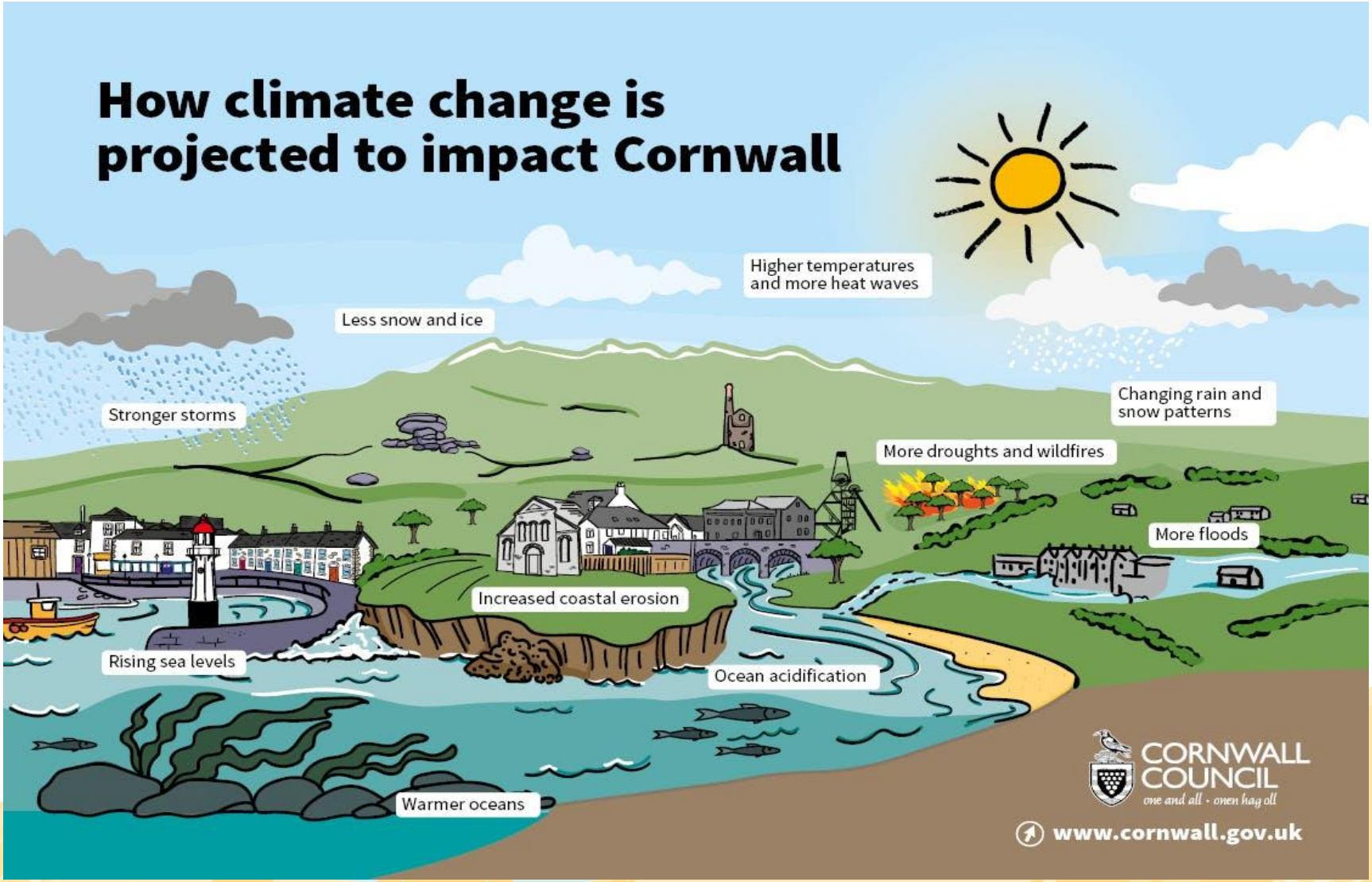
Environment Agency

Flood and coastal resilience innovation programme

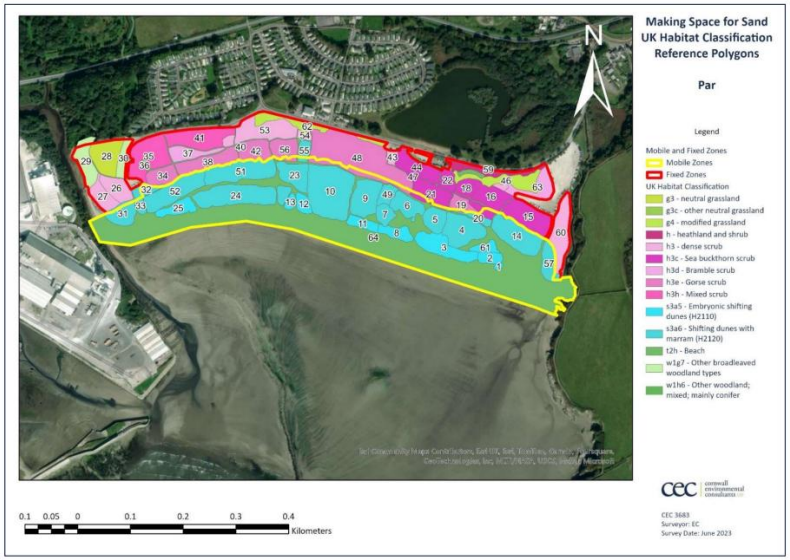
Part of the Flood and coastal resilience innovation fund

This project is funded by Defra as part of the £200 million Flood and Coastal Innovation Programmes which is managed by the Environment Agency. The programmes will drive innovation in flood and coastal resilience and adaptation to a changing climate.

What we know?


How climate change is projected to impact Cornwall
Higher temperatures and more heat waves
Less snow and ice
Stronger storms
Changing rain and snow patterns
More droughts and wildfires
More floods
Increased coastal erosion
Rising sea levels
Ocean acidification
Warmer oceans
CORNWALL COUNCIL
one and all · onen hag oll
www.cornwall.gov.uk

What are we learning?



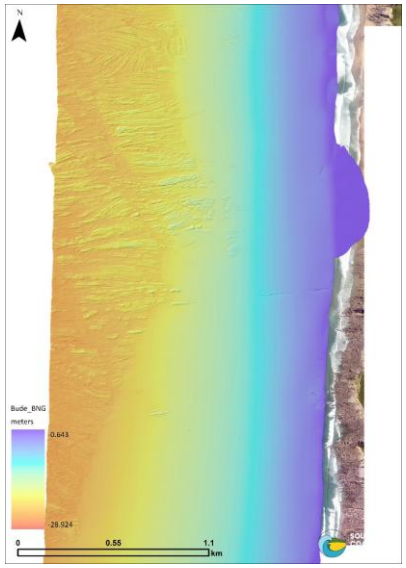
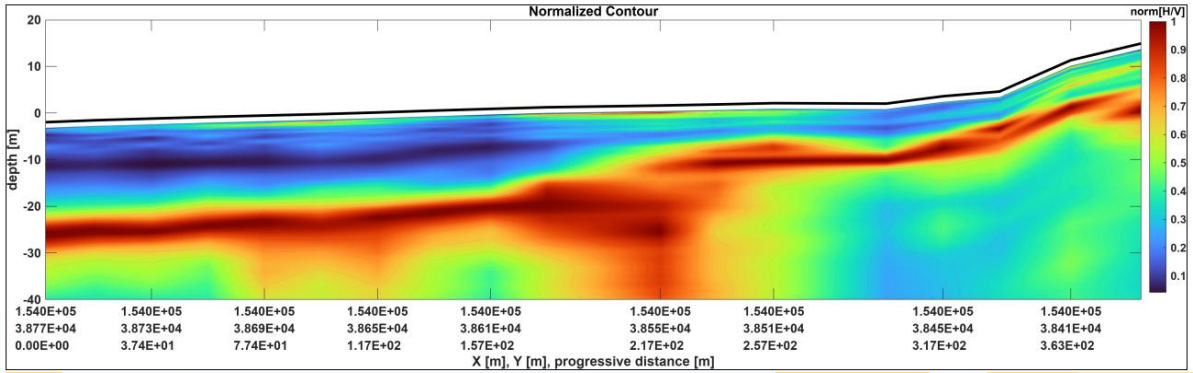
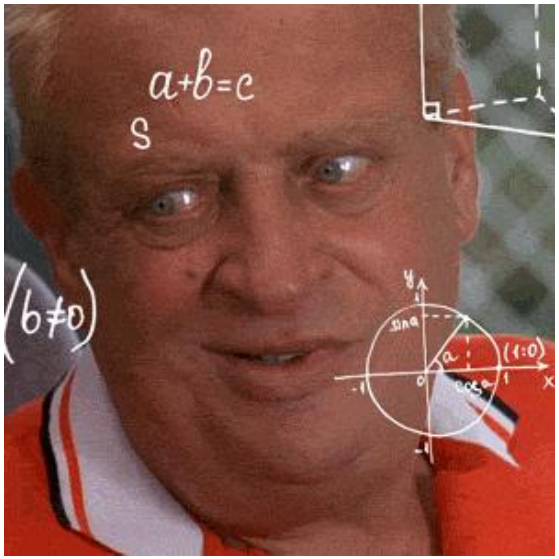


Figure 3: Reference Polygons with UK Habitat Classification



How share learning with younger people?



How share learning with younger people?

How many schools are there in Cornwall? **Over 300!**

How many schools are there in the UK? **Over 32,000!**

How share learning with younger people?

How share learning with younger people?

MINECRAFT EDUCATION

HOW IT WORKS TEACH WITH MINECRAFT Download Minecraft

COASTCRAFT

Manage the coast and make decisions for the needs of the area. You can explore and visualise the future impacts of the decisions made and evaluate approaches to managing the coast.

Subjects

Science | Geography | Climate Science

Ages

8-10 | 11-13 | 14-18

Available Languages

English

Submitted by: Block Builders
Updated: June 12, 2025

What is Minecraft Education?

Who helped make this happen?

making space for sand

BLOCK BUILDERS

Geographical Association

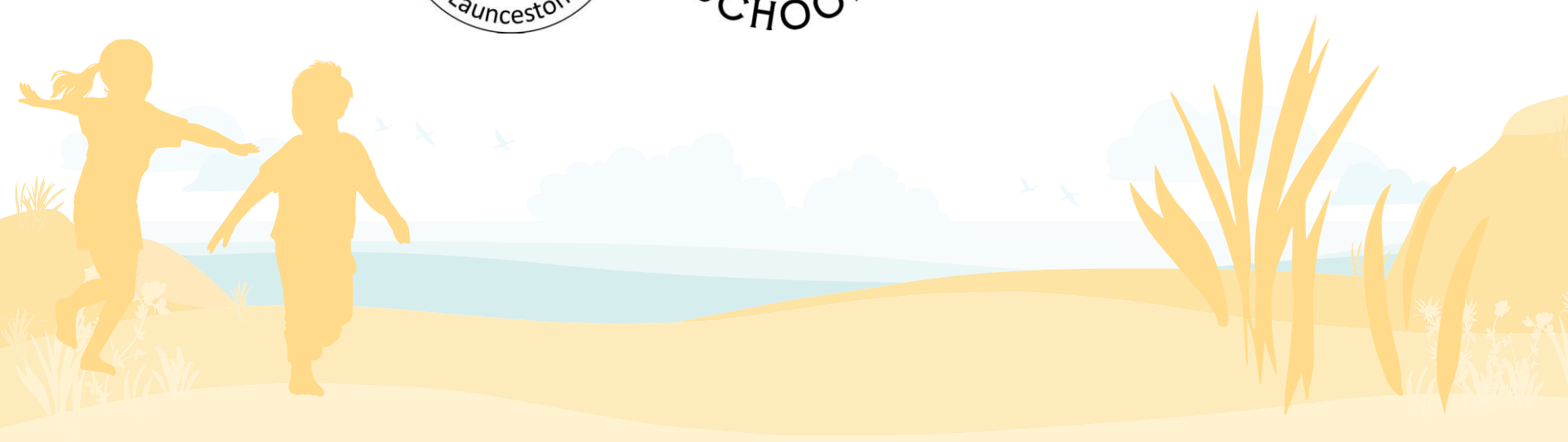
Environment Agency

and……

Windmill Hill Academy Launceston

SIR JAMES SMITH'S SCHOOL

Budehaven Community School



Game objectives

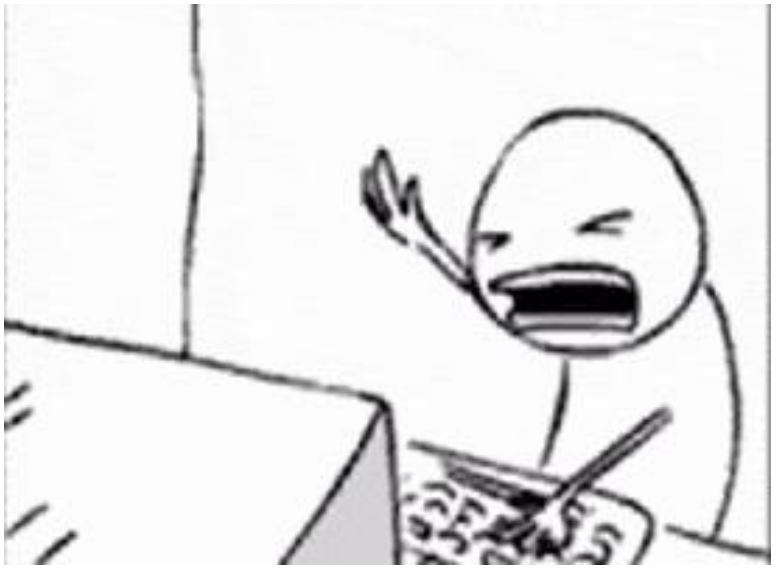
An interactive game to...

- learn about coastal landscapes and how sand dunes are used as a nature-based solution for flooding and coastal erosion
- explore strategies to respond to climate change and sea level rise
- visualise a range of potential futures of Bude, influenced by the choices made

Gameplay

How use?

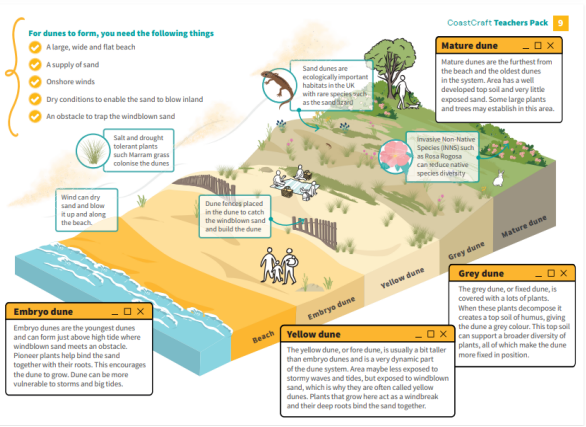
VS

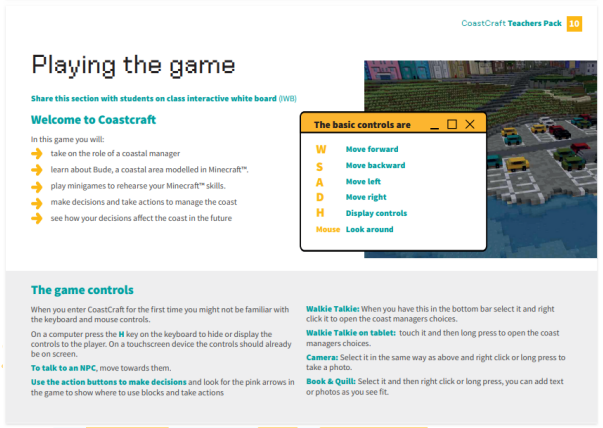


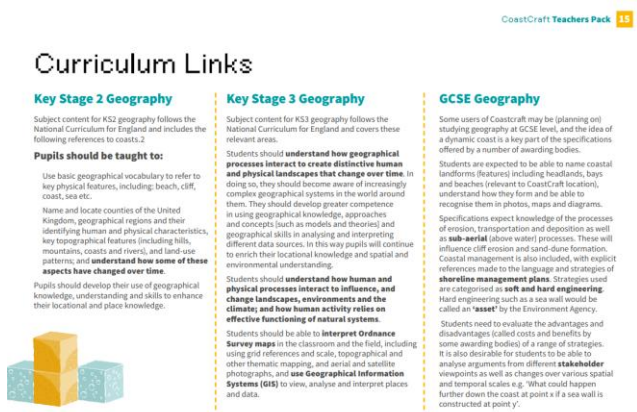
Younger people

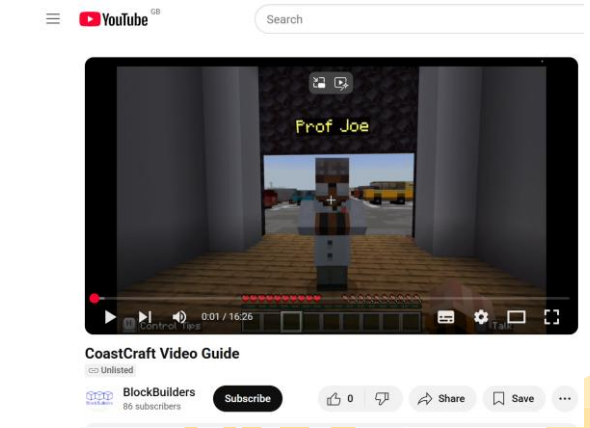
Older people

Game Resources

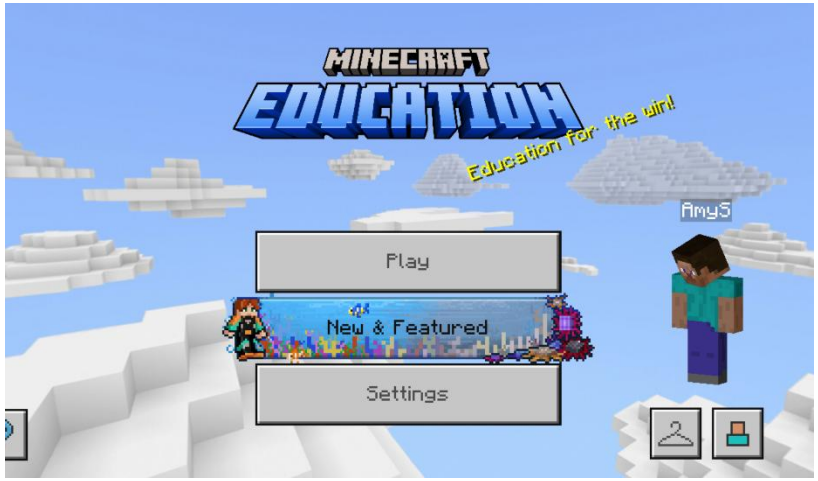


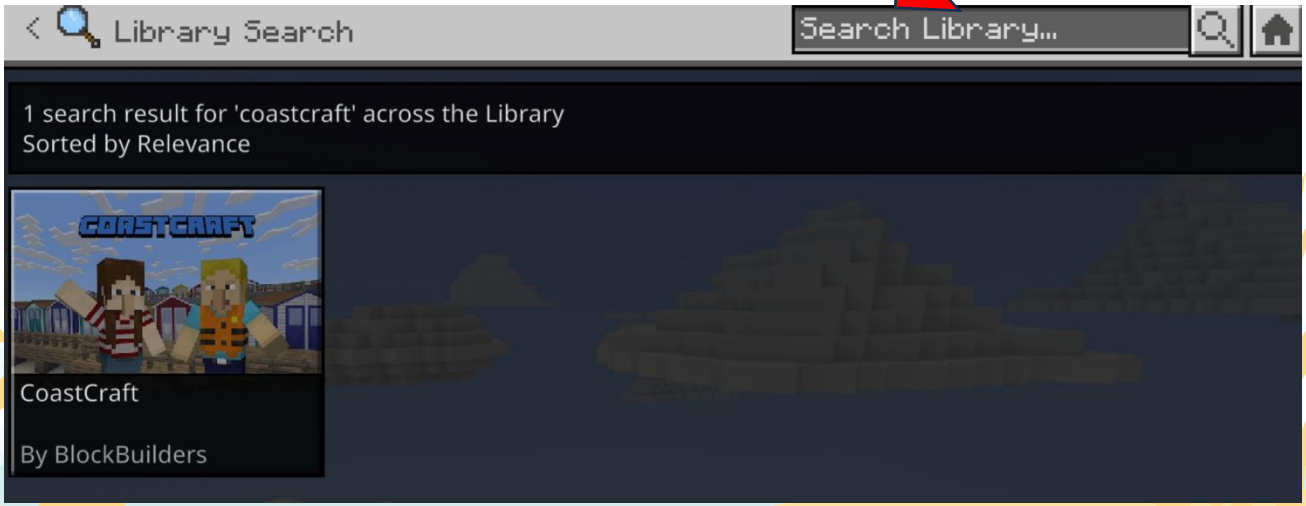






How to find CoastCraft?





Quotes?

“We need to protect the coast to help coastal communities, like Bude, to not flood. In CoastCraft, I think it's quite interactive and quite fun for users, especially our age.”

“I learnt that if I use soft engineering it will protect the coast more naturally. If I use hard engineering it will protect it quickly, but won’t last forever.”

“You can use the money (in the game) in different ways to move buildings to help ensure people are not victims to erosion. I like how you can also go into the future and see how the actions you have taken can help.”

“I would recommend CoastCraft to teachers because it helps students to protect the environment. If you don't do anything about it, then bad things will happen.”

United Nations Office for Disaster Risk Reduction (UNDRR)
925,035 followers
1w

🎮 This computer game is helping children understand climate risks – and what can be done to manage them.

🌊 The new CoastCraft world in Minecraft Education is teaching students about coastal erosion, flood resilience and climate adaptation using hands-on learning through play.

Set in a seaside town in Cornwall, UK, the game challenges players to protect the coast from rising sea levels and extreme weather, making tough choices about infrastructure, budgets, and nature-based solutions.

🚜 Developed by the UK Environment Agency and Cornwall Council as part of a flood and coastal erosion innovation programme, CoastCraft goes beyond abstract scientific models – it lets players experience the real trade-offs of climate adaptation.

💡 By fast-forwarding to 2040 or 2060, students can see the long-term effects of their decisions – a powerful way to connect the dots between today's choices and tomorrow's risks.

Elsewhere, teachers are already using similar games – such as UNDRR's Stop Disasters! – to help children learn how to survive floods, earthquakes and tsunamis.

🐚 Disaster risk education at a young age empowers future generations to understand risk, make informed choices, and build resilience long before crisis strikes.

Learn more about CoastCraft, and start playing as if your life depends on it! ➡️
https://ow.ly/zhVu50XjR2r

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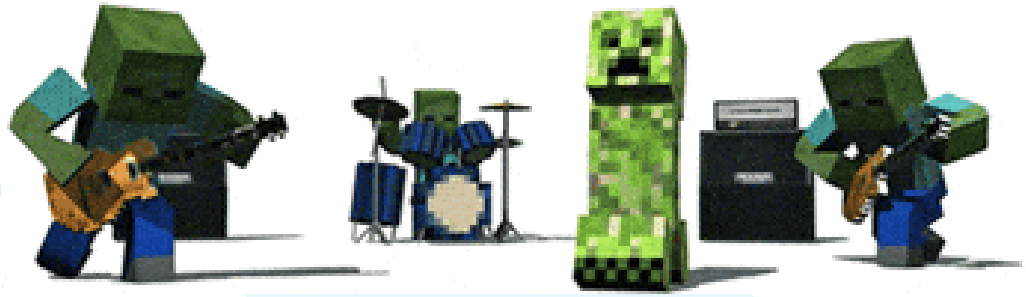
Thank you for listening!



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