Minecraft Build Assessment Guide for Teachers

Unlike highly structured Minecraft education worlds, **Eco Detectives Unite: Race to Zero** is designed as an open world experience.

Students are free to explore, build, experiment, and problem-solve across Eco Island's biomes. While NPCs provide context and mission prompts, the world does **not** heavily direct or instruct players step-by-step.

This means the success of the learning experience relies on a **partnership between the game world and the teacher**.

This guide helps teachers evaluate student builds based on **understanding, creativity, and environmental impact**, not just size or decoration.

What Students Are Being Assessed On

Students should demonstrate:

1. Understanding of Net Zero
2. Correct environmental solutions
3. Connection to Children's Rights
4. Thoughtful design
5. Team collaboration

Simple 5-Criteria Judging Rubric

You can score each category 1–4 (1 = Emerging, 4 = Excellent).

1. Environmental Accuracy

Does the build make scientific sense?

✔ Solar panels placed where there is sun
✔ Wetlands include reeds, water, protection
✔ Wildlife corridors actually connect habitats
✔ Compost placed near soil areas
✔ Reforestation uses appropriate tree types

Look for: Logic over decoration.

2. Carbon Impact Understanding

Can students explain how their build reduces or offsets carbon?

Ask:

- Does this reduce emissions or store carbon?
- How does this help reach Net Zero?

Strong answers include:

- “Trees absorb carbon.”
- “Solar panels replace fossil fuels.”
- “Healthy soil stores carbon underground.”

3. Problem-Solving & Design Thinking

Did students adapt to the biome’s challenge?

✔ Drylands use solar
✔ Mountains use wind/hydro
✔ Cities use rooftop gardens
✔ Wetlands avoid damaging foot traffic

Look for builds that match the environment.

4. Biodiversity & Ecosystem Support

Does the build protect wildlife or habitats?

✔ Wildlife pods
✔ Tree troughs
✔ Animal rehabilitation zones
✔ Mangrove/reed planting
✔ Reforestation of slopes

Students should understand ecosystems are connected.

5. Rights Connection

After collecting a U orb, ask:

- Which right did you unlock?
- How does your build protect that right?

Example:
Wetlands → Clean water → Right to Health
City solar → Cleaner air → Right to Life & Growth

Students should link environmental action to children's wellbeing.

What an Excellent Build Looks Like

An excellent build:

- Fits the biome logically
- Reduces emissions OR stores carbon
- Protects biodiversity
- Includes thoughtful layout
- Can be clearly explained by the student
- Connects to a Children's Right

The key is explanation, not scale.

Common Issues to Watch For

- Random decoration with no environmental purpose
- Renewable energy placed incorrectly
- Ignoring biome instructions
- No ability to explain the build's purpose

If students cannot explain it, they likely don't understand it.

Quick Verbal Assessment Prompts

Use during gameplay:

- "How does this move us toward Net Zero?"
- "Is this reducing emissions or offsetting them?"
- "Which right does this protect?"
- "Why did you place it here?"

Final Evaluation Option

At the end of gameplay, ask each team to present:

1. Their strongest biome build
2. How it reduces or offsets carbon
3. Which Children's Right it supports

Short presentations (2–3 minutes) work best.

Core Judging Principle

You are assessing:

✔ Understanding
✔ Environmental logic
✔ Application of sustainability concepts
✔ Ability to explain reasoning

Not:

✘ Who built the biggest structure
✘ Who built the most decorative space

How to set up

Preparation Step for the teacher

To confidently guide students through the experience, we strongly recommend that teachers explore the Minecraft world themselves before introducing it in class. Playing through the start of the game in advance will help you understand the mission flow, anticipate student questions, and identify key learning moments related to Net Zero and Children's Rights.

Familiarity with the world will allow you to guide discussions more effectively and maximise the educational impact of the experience.

Step 1: Divide students into teams

We recommend between 3-6 players per team.

Step 2: Determine which student becomes the 'host'

The host should be the person who downloads and hosts the game-world so team members can join their world to play together. If there are 4 teams, there should be 4 students who host the game-world. Others should prepare for **step 8**.

Step 3: Download the .mcworld file to your computer (host only)

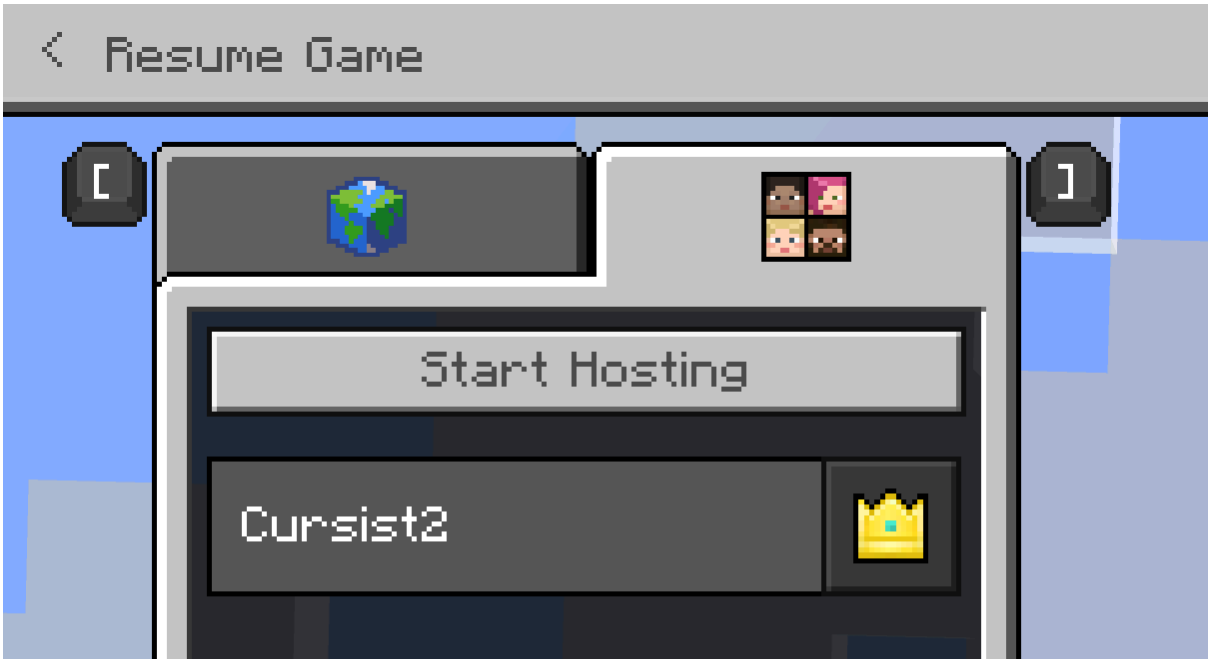
Link to download can be found on the Minecraft Education Platform.

Step 4: Import the game-world file to Minecraft Education

By pressing ‘import’, the game will open file search. Navigate the downloaded file and import it. After this, the world will appear in ‘My Worlds’. The Host can then enter this world.



Step 5: When in the world, click on ‘Start Hosting’



Step 6: Let the Host share the ‘Join Code’ with team members



Step 7: Other team members (not the host) should enter this code via the Play Menu



When the code is filled in, they should press ‘enter’ to join the host’s world!

Step 8: Everyone is in! Now, the in-game instructions can be followed together with the Teacher’s input.

Eco Detectives Unite-The Race to Zero is an initiative of the NSW Department of Education and has been proudly supported by UNICEF Australia, Taronga Conservation Society Australia, ACHPER NSW, Auckland Zoo, Perth Zoo and Zoos South Australia.

UNICEF Australia *is proud to be the major partner for this educational initiative and believe that what makes this educational game so powerful is that child rights are embedded directly into the experience. By bringing together education, play and purpose, this game helps young people understand their rights, build their sense of agency, and see themselves as part of the solutions to the big challenges shaping their future.*

ACHPER NSW *is proud to contribute educational expertise through its collaboration on the Eco-Detectives Unite – The Race to Zero initiative. The teaching resource supports innovative, future-focused learning experiences for students aged 10–14 and is an outstanding example of engaging digital technologies supporting high-quality, curriculum-aligned teaching and learning.*

Through the development of downloadable unit plans, ACHPER NSW equips teachers with practical, ready-to-use lessons that meaningfully connect wellbeing, inclusion, digital citizenship, sustainability and movement-based learning. The resource encourages collaboration, critical thinking and respectful relationships, while harnessing the creativity of Minecraft Education to deepen student engagement.

MAJOR PARTNER

LEAD PARTNER

PROFESSIONAL LEARNING PARTNER

SUPPORTER

SUPPORTER

SUPPORTER