

Sustainability Focus Robotics Activity: Community Engineers

Story Starter

Today, I want to talk to you about something really special. Our local community has many important places that tell us stories of our history. These places include the tall Drover's Rest Boab Trees, the colorful Karungkarni Art and Culture Centre, and the beautiful Butterfly Gorge Nature Park. I wonder if you could think of some popular or local cultural places and list them. These places need to be protected so everyone can enjoy them for a long time.



Community Engineers in Action

Design your Community as a Story Map

- Can you think about all the special places in our community?
- What makes them special?
- Can you draw them on a map?
- How will you show these places in your drawing?
- Can you also construct some of these special places and community sites using everyday recycled materials?

Role Play

Today, you are Community Engineers. Code your Robot to travel to the special places in our community and help you protect them.

Extension Activity

Today is your first day as a Community Engineer. Can you design your own robot?

What features will your robot need to keep these places safe?

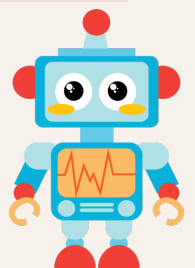
- *Will it need cameras to watch over the places?*
- *Should it have sensors to detect any damage or threats?*
- *Could it have arms or tools to help with repairs or maintenance?*

How can your robot help visitors learn about these special places?

- *Will it have a screen or a speaker to share information with visitors?*

What tools will your robot need to protect these places?

- *Does it need tools to fix things that might get broken?*
- *Can it use lights or sounds to alert people if there's a problem?*



Curriculum Links

EYLF

- Outcome 1: Children have a strong sense of identity
 - Children learn to interact in relation to others with care, empathy and respect
- Outcome 2: Children are connected with and contribute to their world
 - Children develop a sense of connectedness to groups and communities and an understanding of their reciprocal rights and responsibilities as active and informed citizens.
 - Children become socially responsible and show respect for the environment.
- Outcome 4: Children are confident and involved learners
 - Children develop a growth mindset and learning dispositions such as curiosity, cooperation, confidence, creativity, commitment, enthusiasm, persistence, imagination and reflexivity.
 - Children develop a range of learning and thinking skills and processes such as problem solving, inquiry, experimentation, hypothesising, researching and investigating.
- Outcome 5: Children are effective communicators
 - Children begin to understand how symbols and pattern systems work

Primary Links

- People use science in their daily lives, including when caring for their environment and living things (ACSHE022)
- Science knowledge helps people to understand the effect of their actions (ACSHE051)
- Interpret simple maps of familiar locations and identify the relative positions of key features (ACMMG044)