

TRANSPORT

# Level Up

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Level Crossing Safety with  
Minecraft

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Technology  
2022

[transport.nsw.gov.au](https://transport.nsw.gov.au)





## Acknowledgement of Country

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Transport pays respect to Elders past and present, and recognises and celebrates the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of NSW.

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# 01

The idea



# The Original Pitch

- Identified a gap in regional transport safety education resources
- Proposed building a dedicated resource for teaching regional transport safety to children

Item No: 154223

Title: Broken Heel Festival 2017

Description: The Silver City Stiletto train bound for the Broken Heel Festival winds its way through Outback NSW.

Region: Outback New South Wales

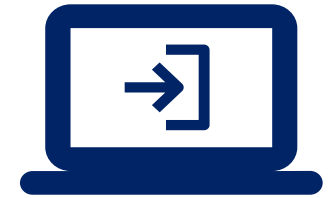
Mandatory credit: Destination NSW

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**Consult**



**Develop**



**Pilot**

# 02

## The Minecraft World





**TfNSW**

**Level Up Rail Safety Pilot**



# MINECRAFT

EDUCATION EDITION

Generating world

Level Up Rail Safety is best played with audio on.



0:00 / 4:42





# 03

## The Teacher Resource

# The Teacher Resource

Science and Technology



Digital Technologies



  
Learning  
Across the  
Curriculum

PD Health PE

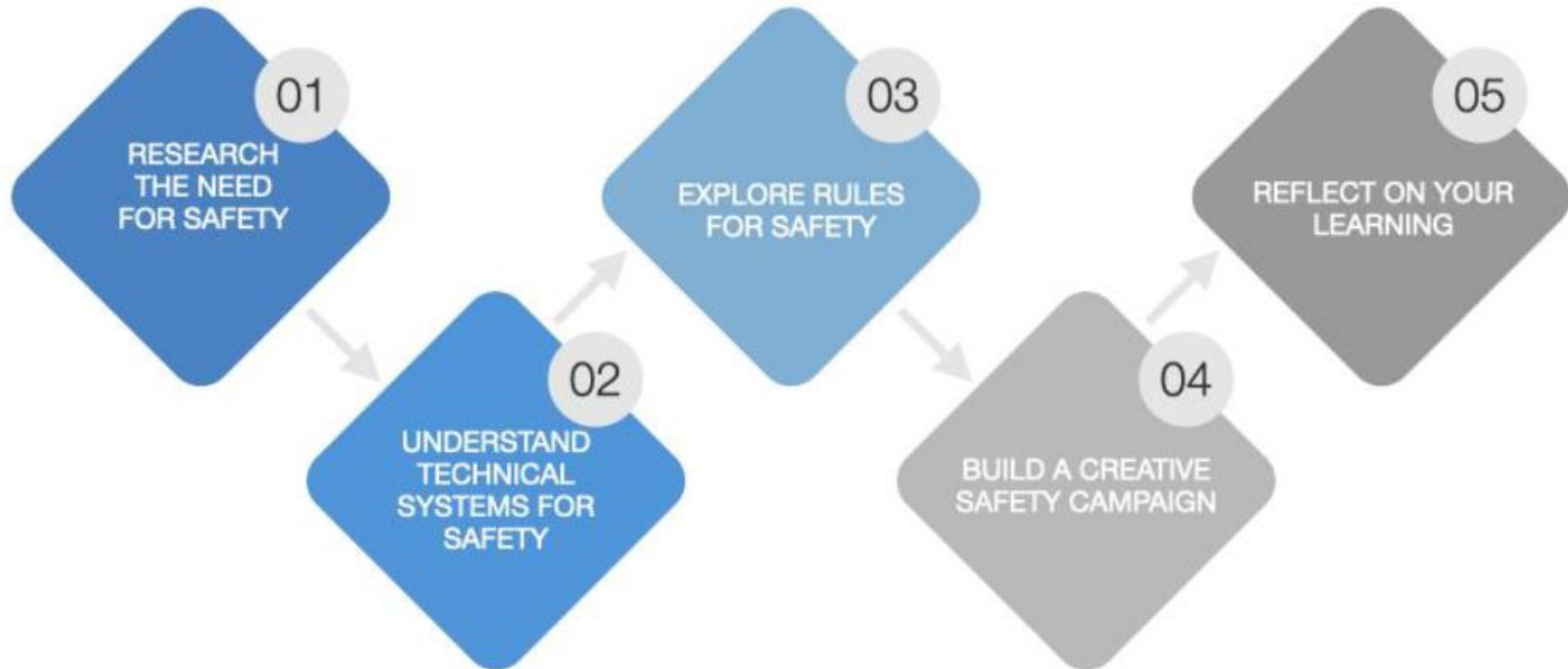


HSIE



  
English

## Learning Activities



# The Teacher Resource

## Teacher Preparation

1. Minecraft installation and accounts
2. Scouting level crossings in the local area
3. Attend the kick-off webinar or View the recorded Level Up introduction video
4. Tour the Level Up Minecraft world

## Suggested Strategies for Evidence Gathering

EXPLORE RULES  
FOR SAFETY  
(1 LESSON)

### IN-CLASS

Create an advice wall for level crossings. As a class students brainstorm the advice they would now pass on to level crossing users, given what they know about trains, crossings and near misses. This wall could be achieved with post-it notes or cards. The wall should be visible to the class for the following lessons and be something students might add to as other ideas arise. They will reference this when deciding on the issues to address in their safety campaigns.

### IN-WORLD

Students return to the library of the lab and explore the resources to find rules for safety at level crossings. What are the rules for pedestrians? What are the rules for cars? What are the most likely causes of accidents and near misses?

## The Lab Simulation Activity Explained



Students will be required to complete three consecutive successful tests in order to be able to upgrade each of the two crossings (rural and urban).

The Settings	A Failed Test	A Successful Test
<p>Students set 5 variables to create a safe level crossing</p> <ul style="list-style-type: none"> <li>distance train is detected from the crossing entry</li> </ul>	<p>If students' crossing is drastically unsafe the simulation will fail.</p> <p><b>Simulation Failed!</b></p>	<p>A successful test can result in two outcomes.</p> <p><b>Simulation Successful!</b></p> <p>If the timings are not within safe bounds students will be</p>



# 04

## The Pilot



# The Pilot



# The Pilot

School	Regional or Geographic Area
Tyalla Public School	Coffs Harbour
South Wagga Public School	Wagga Wagga
Moruya Public School	South Coast NSW
Broadwater Public School	Northern Rivers NSW
Swansea Public School	Hunter
Jindabyne Central School	Snowy Mountains
Ashmont Public School	Wagga Wagga(Riverina)
Kurmond Public School	Sydney West - Hawkesbury
MLC School	Sydney
St Mary's Primary School	Young, South West Slopes NSW
Roselea Public School	Carlingford NSW
Cambridge Park Public School	Penrith

Yagoona Public School	Metro W
Meadowbank Public School	Ryde
Balarang Public School	Oak Flats NSW
Plumpton High School	Western Sydney
St. Mary's Primary School	Scone NSW 2337
Buronga Public School	Far West NSW
Tooleybuc Public School	Riverina
Wee Waa Public School	North West
Morgan Street Public School	Far West NSW
Dubbo West Public School	Dubbo
Burke Ward Public School	Broken Hill
Eastlakes Public School	Bondi met south
Bribaree Public School	Riverina



# The Pilot

We have two Year 5 & two Year 6 classes working on this program. They only have STEM for an hour every fortnight so our process will be slow but we are motivated to get there!!

they know. My students loved the concepts and the opportunity to research and explore as well as to build into the project their own ideas, and creativity. The one thing they missed was the ability collaborate and share ideas and work on problem solving as a team. I would love to be able to actually bring this into the classroom, if we ever get back to f2f teaching.

Students all jumped at the chance to work with 'minecraft' and level up is a controlled minecraft environment, so it gave me as a teacher confidence to lead it.

I would use level up as a transport safety unit most definitely in 2022 as it engages students to learn.

I am finding it is taking quite a while with most of my students still working on mission one. We are slowly working through though. Student engagement is amazing!

Minecraft has provided a wealth of experiences to engage in real world problem solving and exploration of real world issues that students love to engage with. I would love to be able to re-visit this within the classroom as it offers so

school. For me the ability to integrate into our stage 3 physical sciences unit and information literacy is fabulous. In 2022, I would love to include it within my research unit that I teach as it demonstrates alternative ways of sourcing information, yet still ticks the "Mrs Morrison lets us play minecraft!" box.

Absolutely yes. It ticks a lot of boxes in terms of curriculum outcomes. Students found it easy to use and it has high interest (Minecraft)



# 05

## Next Steps

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# Next Steps

1. Funding approved to expand the program
2. Adjust the original resource based on feedback
3. Roll out to schools across the state & or broaden the safety messaging to incorporate additional modes and issues.

