

# [**toolkit:** Flood of Ideas]

APDL 2017 Remix



A toolkit remix designed to act as a vehicle for young people to develop design-led skills in planning and preparing for disaster in their community.

Cover image: Flood sign at the Brisbane Powerhouse being inundated by flood waters at New Farm, 2011 by Troy Hansen

## at a glance .....

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APDL Remix 2017

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### expected duration

This workshop is structured to be undertaken in one 40 minute session however teachers may prefer to break up the workshop into separate exercises over a period of time. Teachers are also encouraged to explore further inquiry (background research) to enhance the ideation exercises.

### exercises

1. Juxtapose
2. Future Scenario
3. Disaster Scenarios

### resources

- Internet connection with access to Google and YouTube
- 4 x blank A5 postcards (or A5 pieces of paper) for every 4 students in the class
- Pencil or pen for each student
- 1 x A3 piece of card for every 4 students in the class
- Various presentation materials (such as coloured card and recycled materials) to develop a poster

### digital resources

- Juxtapose Object Cards
- Plausibility Scale Template
- Wild Cards
- Idea Template

# [australian curriculum overview]

The Australian Curriculum defines a solid foundation in knowledge, understanding, skills and values for all Australian children.

It recognises that children are different: they develop at different rates, have different learning preferences and areas of interest, and have different aspirations.

Australian children are taught about natural disasters in a number of aspects across the Australian Curriculum.

## learning areas

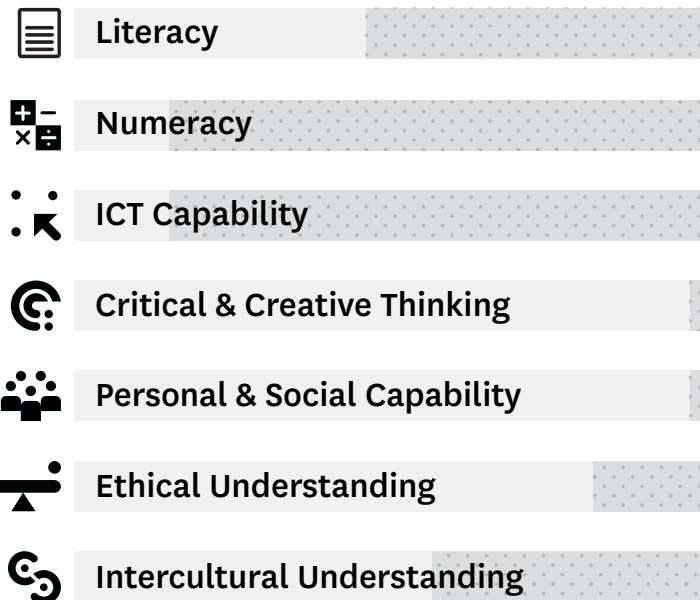
English Mathematics **Science History and Social Sciences The Arts Technologies** HPE Languages

## band of years

F-2 3-4 5-6 7-8 9-10

## capabilities

### general capabilities



### cross curriculum priorities



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# [curriculum links]

Australian children are taught about natural disasters in a number of aspects across the Australian Curriculum.

In the [geography curriculum](#), Year 5 students are taught about natural disasters such as bushfires and floods. In Year 7, students learn about hydrological hazards, and in Year 8, geomorphological hazards (causes and human responses, including readiness).

In the [design and technologies curriculum](#), there are elaborations on disasters. Year 7 and 8 students may

critique competing factors that influence the design of services; for example, a natural disaster warning system for a community.

In Year 3 and 4, an elaboration explores factors that impact on design decisions; for example, considering the demographics of an area or the impact of natural disasters on design of constructed environments such as the structural design of buildings in Japan to withstand earthquakes.

## Brisbane

Learn more about preparing for storm season, types of emergencies and disasters, how to register for severe weather alerts, Council's disaster management plan and the State Emergency Service.

- [Disasters & Emergencies](#)
- [Be prepared for a disaster](#)

- [Types of disasters](#)
- [Prepare!](#)
- [Flood Awareness Map](#)
- [1974 Flood Markers \(Google Maps\)](#)
- [Brisbane Floods: Before/After](#)

## Beyond

- [NASA Earth Observatory: Flooding in Australia](#)
- [Geoscience Australia's Interactive Maps](#)

- [Greencross Australia: Disaster Resilience](#)
- [Scootle Digital Resources](#)

# [background: Flood of Ideas]

After the 2011 floods something new emerged - a group of entrepreneurial thinkers developed an ideas incubator to drive innovation through recovery.

Flood of Ideas was launched on the 1st of March 2011 in response to the devastating Queensland floods.

## Flood of Ideas

Flood of Ideas was an initiative of [Water by Design](#) (Healthy Waterways Partnership) and was delivered as a partnership between Water by Design and [The Edge](#), State Library of Queensland.

Support for the project was provided by:

- [Brisbane City Council](#)

The initiative gathered diverse and creative ideas for how to plan and respond to floods and natural disasters in the future, and to make recommendations for government.

The [floodofideas.org.au](#) website had over 90 submissions and received 3600 visits in its first week post-launch<sup>1</sup>.

- [The University of Queensland](#)
- [Queensland University of Technology](#)
- [The Australian Institute of Architects](#)
- [Green Cross Australia](#)
- [The Stormwater Industry Association](#)

## Resources

- [Queensland Design Council Submission to Flood Inquiry](#)
- [Michael Rayner, Cox Rayner & Queensland Design Council, BIBG QLD Workshop Design Presentation](#)
- [MX: Up to the task - Flood of Ideas on how to keep city safe](#)



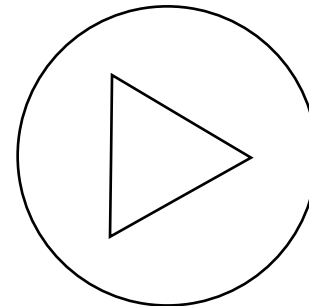
<sup>1</sup> <http://www.greencrossaustralia.org/our-work/disaster-and-community-resilience/queensland-flood-and-cyclone-response-build-it-back-green-qld/flood-of-ideas---new-thinking-drives-recovery.aspx>

# [ **Reference:** Queensland's floods video ]

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ABC weather reporter Jenny Woodward talks about the history and causes of flooding in Queensland.

Access this video and more using SLQ's [Onesearch](#) catalogue.



# [Juxtapose]



## method

All class exercise.

## activity

The class is divided in half and each half forms a straight line directly facing each other with about 5 metres between the first person in each line. Try to emphasise the excitement and urgency of this exercise. Momentum will build if students are having fun and encouraged to take risks and fail. This exercise is best done outside in an open area.

This is an exercise in creative thinking and improvisation with little resources. It's OK to be silly and have fun with this exercise, as long as students find a way to work together.

The teacher will give each student an object card to each person in each line. Students then have about 30 seconds to think about or discuss with the rest of their group what they

might be able to do with that object.

On the teacher's instruction each students walks to the student directly opposite them and they share their object with each other. The challenge is to find a way to use the two objects together to save their house.

### For example

One student has 10 metres of rope and the other has a pack of balloons. They tell each other their items and quickly decide:

Tie the rope to the corners of our house, fill the balloons with super strong helium and tie the balloons to the rope. Lift the house off the ground until the water subsides!

## prompts for reflection

- What do we learn from improvisation?  
(I.e How to resolve 2 disparate things to come up with a new solution to a problem)
- Where else could we apply this process of improvisation to solve complex problems?  
(I.e. This exercise is useful for exploring problems that need a completely fresh perspective)

# [Future Scenarios]



## method

Students work in groups of 2 to 4.

## activity

Ask the students to imagine a situation in the distant future.

Thanks to advanced science and technology we are able to predict that a flood event 1 metre higher than the 2011 January floods will reach Brisbane.

Using the ideas developed in the Juxtapose activity as a starting point, students have 5 minutes to write down as many ideas for how they would plan for this event in the future.

Students are encouraged to map their ideas on the plausibility scale template from easy to impossible and practical to radical.

Each group is then asked to share verbally their ideas for each of the scenarios. Groups then select their favourite idea to develop further in the next exercise.

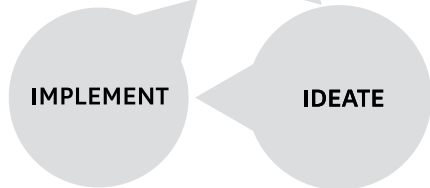
## prompts for reflection

- What do we learn from projecting this far into the future?  
(*I.e. With more time and less limitations we are able to plan better and explore more possibilities*).
- What do we learn about which ideas are popular?  
(*I.e. Good ideas have the ability to inspire and excite others. Good ideas need momentum and the support of others to develop*).





# [Disaster Scenarios]



## method .....

Students work in groups of 2 to 4.

## activity .....

Each group is given one Idea Template<sup>1</sup>. Using the idea they selected in the previous exercise, students are to further develop their design solution.

Students are to describe their idea, sketch it and describe its key features. Students are to identify a

timeline for launch (1 week, 1 year, 25 years, 100 years, etc.) and to identify the category of their design.

At the end of the exercise students are to explain to the rest of the group their idea and how they've presented it.

## prompts for reflection .....

- How does the addition of a time context change your idea?
- How did sketching your idea change your concept?
- Did you add features or take them away as you were designing?

<sup>1</sup> The Idea Template is aligned with the APDL Collection Categories ([Public Places](#), [Fashion](#), [Better Living](#), [Design Thinking](#) & [Visual Communication](#)) and we would encourage participants of this workshop activity to align their design solution within one of these broader categories. We have linked one great book from our collection for each of these categories that we think would be a great place to start!

# [Flood of Ideas: Workshop]



Photo by Nicola Flanagan

