

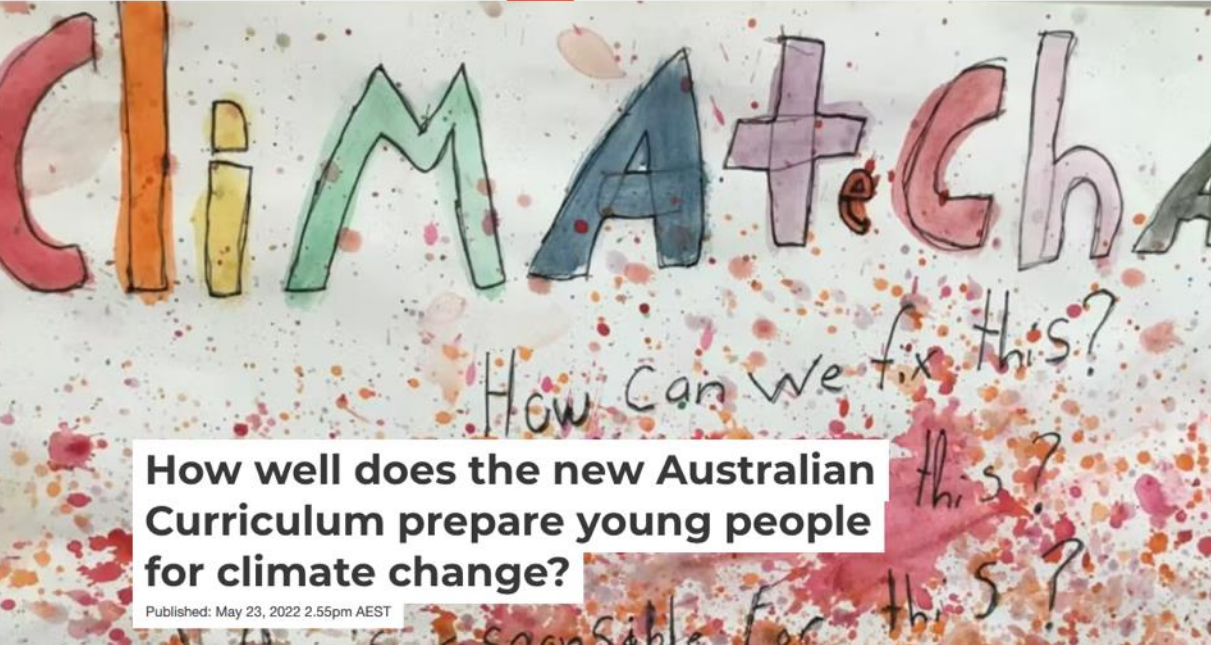


**CURIOUS  
CLIMATE** **SCHOOLS**

# Answering children's questions about climate change

Dr Gabi Mocatta, Climate Futures  
Geography, Planning and Spatial Sciences, University of Tasmania





## How well does the new Australian Curriculum prepare young people for climate change?

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You'd be forgiven for not having heard about the long-awaited new [Australian Curriculum](#), which was released with little fanfare in the midst of the election campaign. But this update to the national curriculum (9.0), for foundation to year 12 students, is hugely significant. It will guide the education of young Australians for the next six years, which could encompass a child's whole primary or secondary school education.

Education fundamentally prepares children for life, so it should be expected to address the existential issues of our time. On our current trajectory, climate change will drastically affect children's [health](#), [wealth](#) and [job futures](#). Today's children face [up to seven times as many](#) extreme weather events as people born in the 1960s experienced.

If we are to tackle climate change and adapt to the impacts that are already unavoidable, then children need to be educated for a [changing future](#). Until now, however, this subject matter has been [largely missing](#) from the Australian Curriculum.

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"As students, we need to be given the knowledge, skills and resources necessary in order to build a resilient society that can deal with the impacts of the climate crisis."

@ScarlettOWest in the Ecologist



theecologist.org  
Pupils present climate education bill  
A new climate education bill has been called for matters relating to climate change and sustainability to be integrated throughout the ...

Curious Climate Schools (CCS) is a climate literacy project for kids from Grades 5-12.

Students' questions are answered by climate experts.

CCS has worked with over 1300 students to date to inform and engage them on climate change

.....and even to inspire them to understand their role in solutions.



A project led by: Chloe Lucas<sup>1,2</sup>, Gabi Mocatta<sup>1,5,6</sup>, Rachel Kelly<sup>2,3</sup>, Kim Beasy<sup>4</sup>, Gretta Pecl<sup>2,3</sup>, Charlotte Jones<sup>1</sup>.

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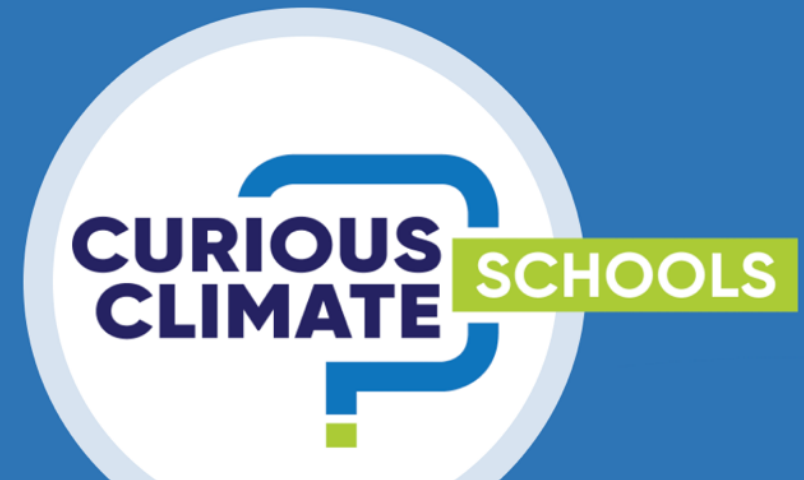
6 School of Communication and Creative Arts, Deakin University

# Why climate literacy?

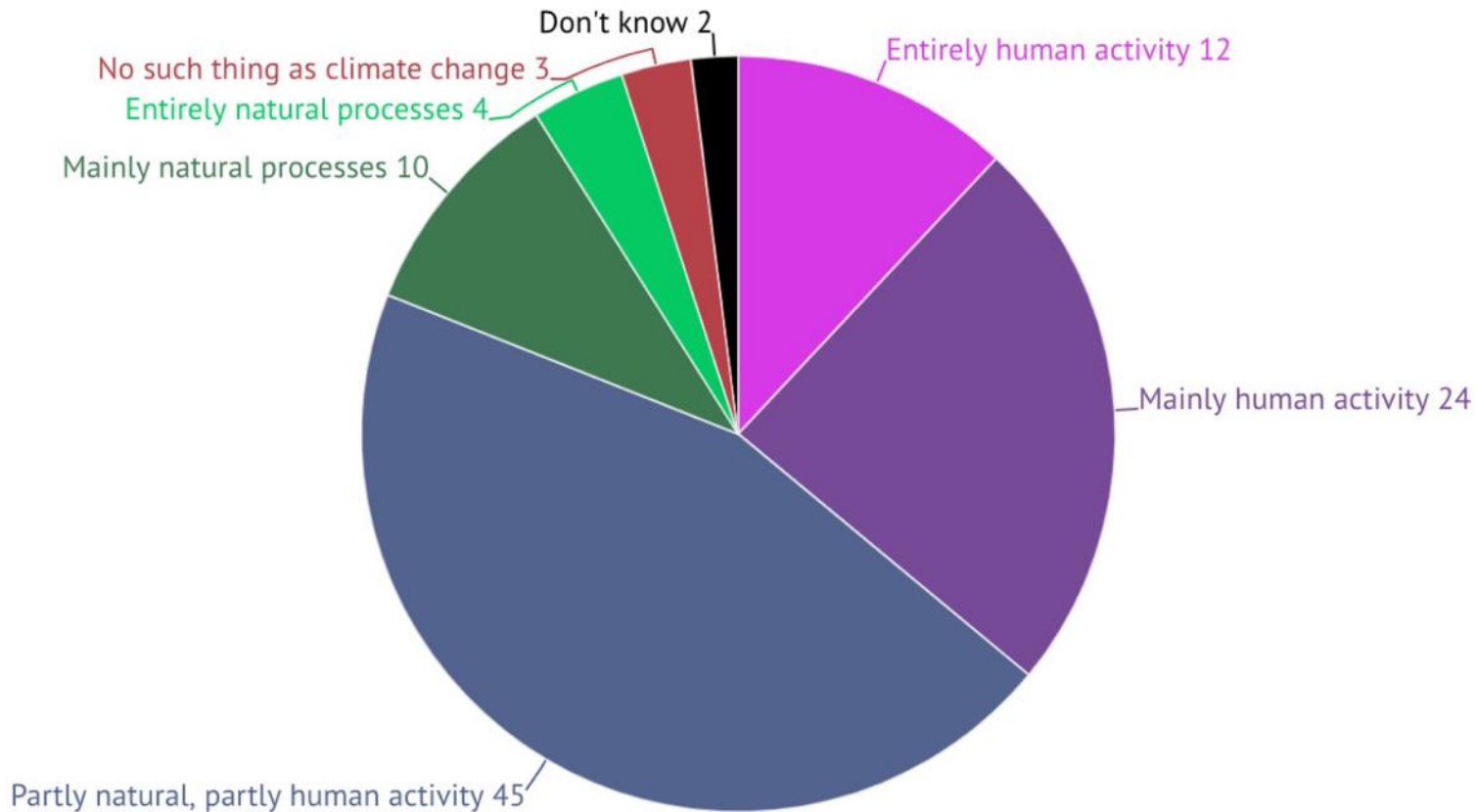
Climate literacy: “an understanding of your influence on climate and climate’s influence on you and society” (United States Global Change Research Program, 2009, p. 4).

Climate literacy is essential for climate “concern” (Guy et al., 2014; Stoutenborough & Vedlitz, 2014)

“Concern” is precursor to climate action.



# Climate literacy is still not high in Australia



Ipsos poll (1014  
Australians)  
December 2019

Q: What causes  
current climate  
change?

A group of eight children in colorful winter jackets are standing on a rocky mountain peak, looking out over a vast landscape under a bright blue sky with scattered clouds. The sun is shining brightly in the upper right corner.

## Curious Climate Schools

Answering students' questions about  
climate change



[curiousclimate.org.au/schools](https://curiousclimate.org.au/schools)

## Pedagogical principles:

1. Participatory, student-led inquiry
2. Holistic approach to climate literacy
3. Acknowledging feelings
4. Empowering individual and system change
5. Being part of a global conversation

(Kelly et al. forthcoming 2023)



# CURIOUS CLIMATE SCHOOLS

1

Teachers register for the project and are sent guidelines for participation



2

Students brainstorm questions and classes vote on their top 10 questions



3

Curious Climate Team sorts and assigns questions to experts



4

Experts answer via short videos or text and images



5

Curious Climate Team checks, edits and uploads answers to website



6

Website with questions, answers, maps, classes and useful resources goes live

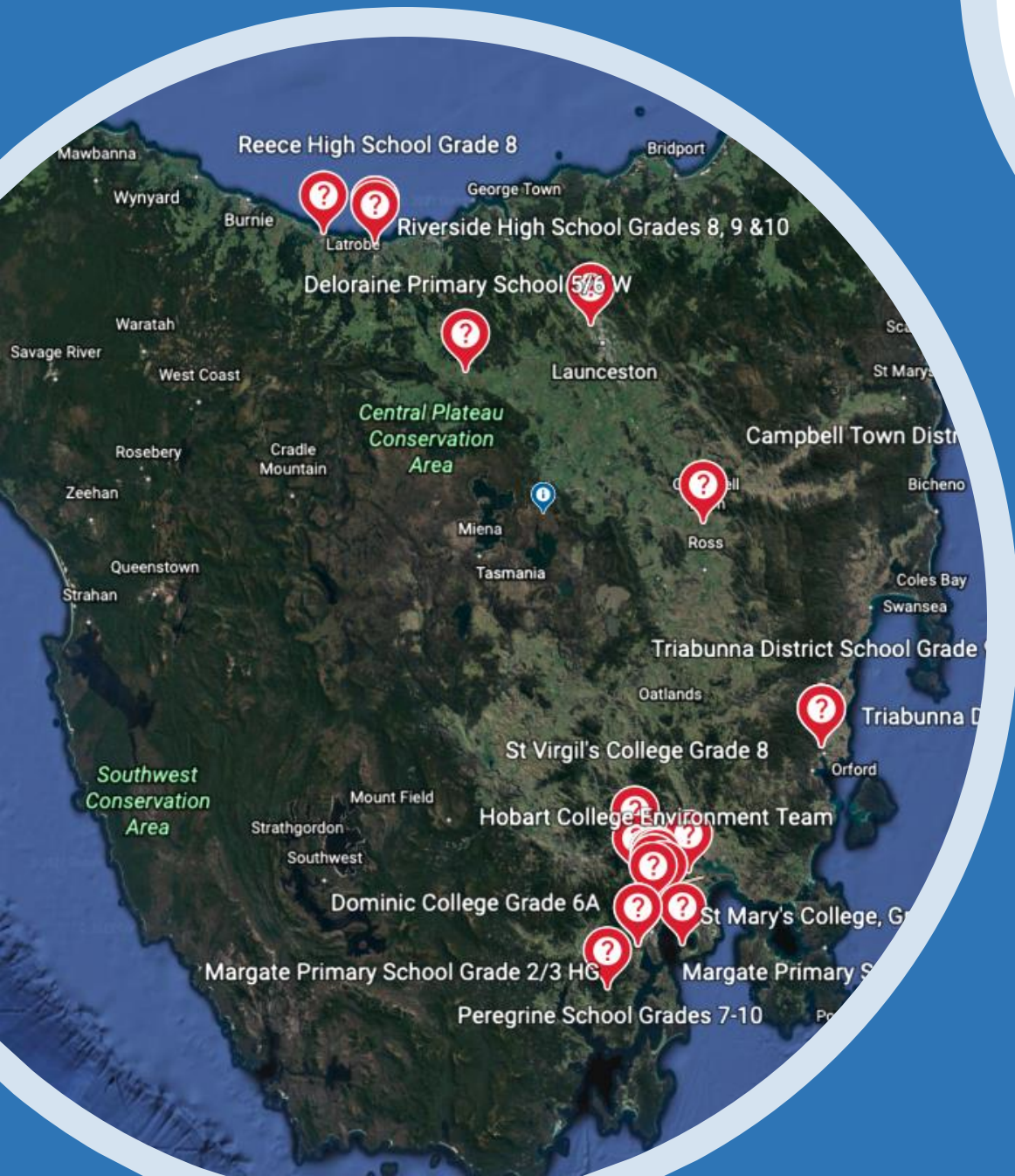


7

Experts visit schools







In 2021: 28 classes from around Tasmania brainstormed questions and voted on 280 'must ask' questions.

In 2022: we have been sent 210 new questions by 21 classes.

# Key themes in students' questions (2021)

- 22% asked 'What can we do?'
- 15% asked for predictions of future climate impacts.
- 9% asked about responsibility for climate change and climate action.
- 7% asked if it is too late to go back to the way things were.



What effects/impacts of climate change are now irreversible or is climate change reversible?

*How long do you think with the way things are going right now before Earth becomes unliveable for humans?*

How long will we be able to survive on our planet if we do nothing to try to slow down/reverse climate change?

If we can stop/reverse it, would we be able to completely heal the damage that has been done?

How long do we have to fix climate change before it's too late?

Is it too late?

Is it possible to reverse the effects of climate change?

Can climate change be reversed and go back to the way it was?

If nothing changes, how long do we have?

How much time do we have to stop climate change?

Is it too late to stop climate change?

How much longer is it estimated until climate change destroys the world?

When will climate change be irreversible?

Is it possible to reverse the damage caused by climate change?

Can we stop climate change or is it too late?

How long do we have left before it is irreversible?

How long do we have to solve climate change before it is too late?

If we act fast enough can climate change be completely reversed?

*What changes that have occurred are irreversible, and what changes are happening/will happen that cannot be reversed?*

# Supporting children and teachers



**What can I do?**

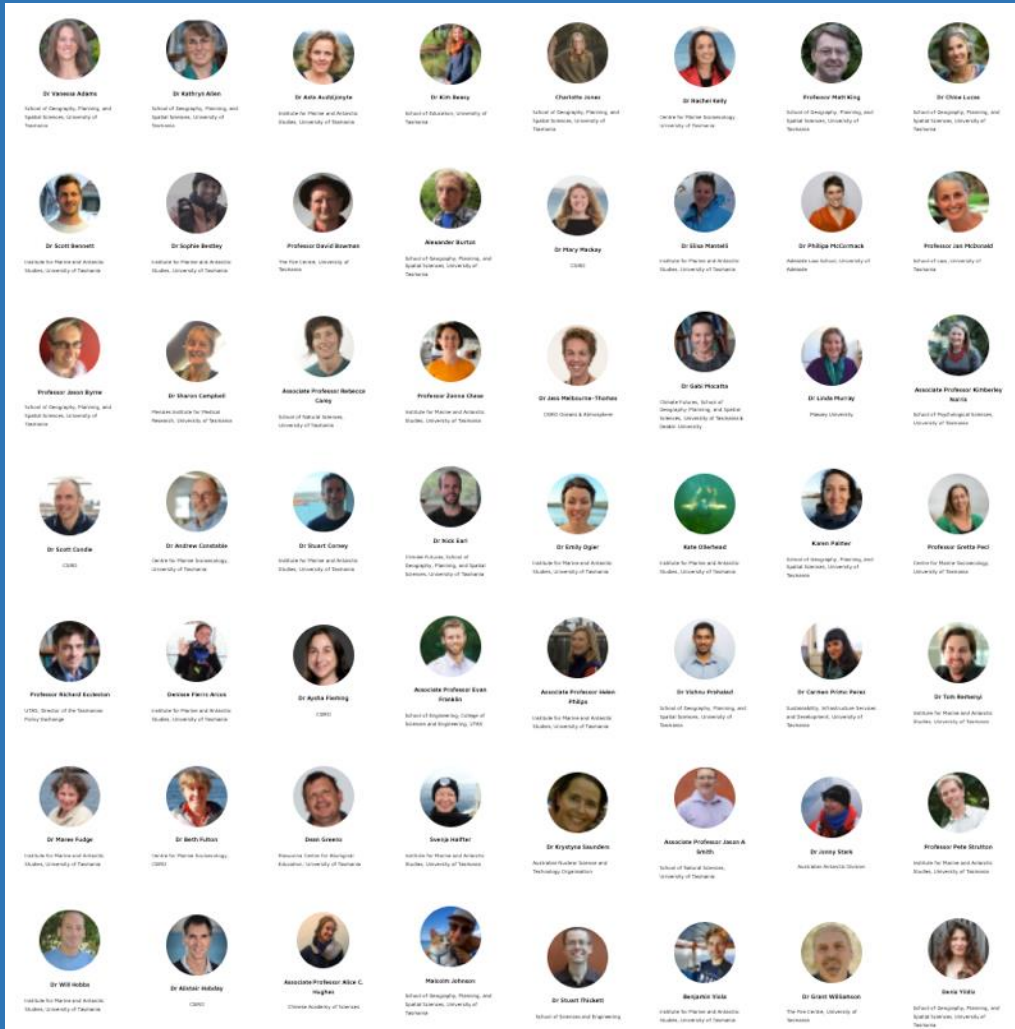


**Feelings about  
climate change**



**What's being done?**

# Expert answers



Dr Jess Melbourne-Thomas



## Affiliation

CSIRO Oceans & Atmosphere

## Research Areas

Climate change & marine socioecological systems

## Why I do what I do

I mostly work on developing tools to support adaptation for communities, industry, government and natural systems.

## Something interesting about me

I fell through sea ice in Antarctica right next to a minke whale.

How do we protect our endangered animals that are endangered due to climate change?

View Answer



Answered by Dr Philippa McCormack

We know that there are many techniques available to prevent and revert the effects of climate change, so what is stopping us from implementing them?

View Answer



Answered by Dr Chloe Lucas

How do we stop pollution of factories?

View Answer



Answered by Professor Jan McDonald

How long do you think with the way things are going right now before Earth becomes unliveable for humans?

View Answer



Answered by Professor Gretta Pecl

What role does ozone play in climate change?

View Answer



Answered by Dr Nick Earl

Did Covid stop people from travelling and have a positive impact on climate change?

View Answer



Answered by Malcolm Johnson



Questions?

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[curiousclimate.org.au/schools](http://curiousclimate.org.au/schools)



# References

Guy, S., Kashima, Y., Walker, I., & O'Neill, S. (2014). Investigating the effects of knowledge and ideology on climate change beliefs. *European Journal of Social Psychology*, 44(5), 421–429.

Stoutenborough, J.W., & Vedlitz, A. (2014). The effect of perceived and assessed knowledge of climate change on public policy concerns: An empirical comparison. *Environmental Science & Policy*, 37, 23-33.

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