



THE UPWELLING

Teachers Notes

The Upwelling written by Lystra Rose

Teachers Notes prepared by Lystra Rose

(in consultation with Indigenous community members according to cultural protocols).

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OVERVIEW

The Upwelling is a story about a young surfer, Kirra, who is mysteriously called into a place without Western influence and learns she has the power to save the world. But a world-saving hero comes at an unexpected price, and it's never a one-person job.

Kirra lives on the Gold Coast with her nan. Kirra's dad works in the mines, and she has counselling to help with the loss of her brother. At sixteen, Kirra realises her dreams can come true. Nan is furious because Great Nanna Clara was also a truth dreamer. Before Kirra was born, the authorities placed her great-grandmother in a psychiatric hospital, which sent Nan into foster care at a young age. But, like Great Nanna Clara, no-one believes Kirra's dreams are coming true. This would be fine if the world wasn't going to end. When Kirra's world-ending nightmare forces her to surf where her brother was killed, she time-slips into a place that could ruin her life, here, and in the Dreaming.

'Here' is where Kirra meets Tarni, the daughter of a fierce hunter. Tarni's tall, confident and the custodian of a clever gift – she understands Kirra when no-one else can. But Tarni must uncover who sent their unexpected visitor: a powerful ancient healer or an evil shadow-spirit? Tarni's discovery will determine whether Kirra lives or dies unless this strange guest was accidentally beckoned by the tribe's dolphin caller, Narn.

Narn is the son of a well-respected Elder and holds an enviable role in his saltwater clan. Though he bears the marks of a man, many treat him like an uninitiated boy, including the woman he wants to impress, the tallest and cleverest female in the clan.

When the shadow-spirit threatens all life, these three misfits are sent to stop two warring spirits and save the world. Earth's future relies on a short-sighted surfer, a laidback dolphin caller and a feisty language unweaver.

Additional information about *The Upwelling*:

- 2023 Victorian Premier's Literary Award for Indigenous Writing Shortlist
- Winner of the 2018 black&write! Fellowship; Vicki McDonald (the CEO of the State Library of Queensland) stated in her 2018 speech – *The Upwelling* is a 'highly original coming-of-age story, unlike anything they [the judges] had ever read.'
- Enthralling Australian story set in Yugambeh-speaking Country (Gold Coast).
- Strong female/male role models.
- Genre meld – publishers say *The Upwelling* is a new genre.
- Well-suited to the Australian Curriculum for secondary students.
- Compelling Young Adult fiction with strong First Nations cultural content and introduction to pre-colonisation lifestyle.
- Driven by strong characters with an emphasis on growing emotional intelligence.
- Yugambeh Language glossary, pronunciations, and other Indigenous terms and concepts.
- Highly recommended for ages 13+ (but would suit stronger middle-grade readers).

BEFORE AND AFTER READING THE NOVEL

Before reading *The Upwelling*: Students discuss and write what Aboriginal culture is. Does it differ from tribe to tribe, and explain why or why not? Write down any thoughts on Indigenous philosophy or science.

After reading *The Upwelling*: Revisit the above questions and write down answers. Discuss if/how their viewpoints have changed. Now, readers are custodians of

this knowledge; what does this mean, and how are you accountable for this new knowledge? Being a custodian of knowledge means passing it on in the right way and right moment – what does this mean for each student, and when/how can students achieve this? When would be the wrong way/moment? [Hint/further discussion: Is it okay for non-Indigenous people to explain/teach Indigenous people about Indigenous culture?]

THEMES

‘Knowing where you’re from is a form of knowing who you are.’ (page 355)

The central theme for each main character is:

- The more you know yourself (identity, self-belief), the more you’ll know your purpose (belonging within a family/community).
- Kirra learns the above point through exploring ‘truth’. What is truth, and why/how she needs it? Her initial belief: the truth will NOT set you free. By the end of the story, Kirra learns not to care about what others believe or think about her. She realises the truth will set her free to be herself, to trust herself – even if she has to stand alone.
- Narn learns the above point through exploring ‘respect’. What is respect, and why/how he needs it? His initial belief: Narn wants true respect, like his father Birrabunji, who’s confident and courageous and knows the right thing to do and when to do it. By the end of the story, Narn understands the importance of being part of a community.
 - Tarni learns the above point through exploring ‘truth’. What is selfless love, and why/how she needs it? Her initial belief: she won’t be loved for herself. By the end of the story, Tarni can love even if she isn’t loved in return. She learns about unconditional love – if she expects it, she

needs to give it.

- Balance of spiritual and physical world: the spiritual realm is impinging on the physical one (shadows snuffing out the light). Each individual’s purpose affects the global community.

Other themes include:

- Aboriginal peoples’ social life and customs: seasonal calendar, bushtucker, lore, community, kin, Country, totems, respect, Elders, ancestors, language, dance, song, community, firestick farming, weaving, bora rings, spirituality, *buhnyi buhnyi* festival, mullet festival, sustainability, dolphin calling, adoption and possum-skin cloaks
- Identity: it’s never too late to learn about culture
- Connection: family, Country (land and sea), to who you are and where you belong
- Surfing and surf culture
- Good vs. evil
- Dreaming stories
- Courage
- Working together
- Emotional intelligence (growing a strong mind and learning to follow intuition)

AUDIENCE AND WRITING STYLE

The Upwelling is told in first person, present tense, and alternates between the three perspectives of Kirra, Narn and Tarni. First person (from each main character) not only gives a sense of immediacy with a decent pace, but it is a technique to experience Indigenous culture in 'stealth' mode through three different avatars. Kirra: a First Nations teenager who lives in urban Australia. Tarni: a Kombumerri woman raised in pre-colonial Australia. Narn: a Yugambeh-speaking young traditional man with an ancient connection to dolphins.

This coming-of-age young adult novel has elements of speculative fiction and interweaves Yugambeh language, Aboriginal customs and cultural lore. It melds two storytelling methods: circular and linear.

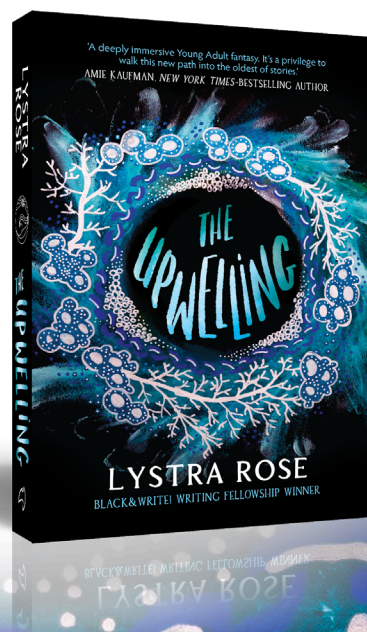
In Aboriginal and Torres Strait Islander culture, there is circular (or spherical) storytelling, which can be told from any moment in time and has no starting or ending point. Yet, the Western storytelling method is linear with a beginning, middle (including a conflict/resolution) and an end. Non-linear storytelling means different members of a tribe are knowledge-holders of a piece of the story, and it's essential to connect to all the other knowledge-holders to understand the whole story and to ensure the story doesn't get lost.

Lystra Rose's writing style has been described by her peers as 'a deeply immersive ... enthralling debut' (Amie Kaufman, New York Times-bestselling author) as well as 'fresh', 'compelling' and 'uniquely Australian storytelling with purpose and a poetic sensibility' (Tim Baker, bestselling author).



ABOUT THE AUTHOR

Lystra Rose is a descendant of the Guugu Yimithirr, Birri Gubba, Erub and Scottish nations. She is an award-winning writer and editor who lives in a land where the rainforest meets the sea ... Yugambeh-speaking Country (Gold Coast), Australia. When Lystra's not catching waves with her husband and their two groms, she is editing *Surfing Life* magazine and is the executive producer of *Surfing Life TV* (globally broadcasted on Fuel TV). She is the first female editor-in-chief of a mainstream surf magazine in the world. Surfing is Lystra's daily reminder to 'let fear be your friend, not your foe, and use it to do the things you love or were meant to do'. It's also her creativity generator.



CULTURAL NOTES

Embed Aboriginal and Torres Strait Islander perspectives into your curriculum by educating students about local Indigenous languages, history, seasonal calendars (and corresponding Dreaming stories). Invite a local Indigenous guest speaker to discuss 'same-same' cultures. That is where another Indigenous nation's culture is 'same-same' with Yugambah-speaking culture in *The Upwelling*. Learn the unique language and culture of where your school is based. Please remember, we want to debunk the myth of 'one Indigenous culture/language/nation' in Australia. Instead, there are many languages/cultures/nations.

This can be complicated as there are many shared or 'same-same' customs within many tribal nations. For example, in both Indigenous and Torres Strait Islander nations, we have totems, so there's an organised system to care for every living and non-living thing. But there are many customs specific to each nation, for instance, language, Dreaming stories, etc. However, some Dreaming stories can be shared through many nations too. For instance, there are many shared cultural Dreaming stories and experiences where trained dolphins herded in fish in many coastal communities along Australia's East Coast. Some of the ways Aboriginal people communicated with dolphins varied throughout these tribes (and even clans).

The Australian Council for the Arts website has more about Aboriginal and Torres Strait Islander writing protocols and resources: <https://australiacouncil.gov.au/investment-and-development/protocols-and-resources/protocols-for-using-first-nations-cultural-and-intellectual-property-in-the-arts/>

Where can I find or contact Indigenous people if I don't know any?

After reading the above Indigenous protocols, how/where can I contact a local Indigenous Elder/person to be a guest speaker in my school? Here are some suggestions:

- Some schools or regions have Indigenous-specific roles, like an Indigenous Education Liaison Officer.
- Each local council usually has an Indigenous Liaison Officer – please remember they may be the only Indigenous person working in this role and are given every referral (from welcome-to-country ceremonies to speaking queries, etc.) It will take time.
- Relevant local, regional or state Aboriginal (or Torres Strait Islander) land councils
- Native title organisations
- Indigenous writing groups: FNAWN [First Nations Australia Writers Network]. There may be an Indigenous author who is a traditional custodian of where your school is based.
- State libraries, local governments, and Indigenous businesses also run workshops/hold forums where Indigenous people speak about cultural protocols. Indigenous peoples must share their culture according to Indigenous protocols (lore and shared knowledge).
- Indigenous language centres/museums
- Indigenous art centres
- It's important to note it is a better option if you know someone who can introduce you to a local Indigenous Elder/person rather than sending a letter, email or phone call.

Connections and relationships are a big part of introductions and showing you're 'trustworthy'. Also, please invite two (or more) Indigenous people to come into the school environment for cultural support. The idea is to create a culturally safe place for Elder/s and Indigenous community members to feel comfortable and respected. For example, ask to see if they prefer speaking outside or sitting in a large circle. It would be appropriate to give a 'thank you' gift – no different from traditional trade methods (in this case, knowledge is traded for a small gift, on top of pre-arranged payment for their time). That way, as a teacher, you show you're 'trustworthy' with cultural knowledge and protocols, which will spread through the Indigenous communities.

LINKS TO THE AUSTRALIAN CURRICULUM

See the appendix for relevant content descriptions, cross-curriculum priorities and how the classroom ideas link to the text. These notes and the classroom activities provided have been written in context with the following areas of the Australian Curriculum:

Year Level	Curriculum Area
Year 7	English (Literature), HASS, Language Awareness, Visual Arts, Science (Understanding Earth and Space)
Year 8	English (Literature), History, Geography, Visual Arts, Language Awareness
Year 9	English (Literature, Literacy), Language Awareness, Historical Knowledge and Understanding, Science (Understanding Earth and Space)
Year 10	English (Literature, Language), History, Geography, Language Awareness

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander Histories and Cultures; Sustainability

CLASSROOM IDEAS - ENGLISH

- Create **character profiles** of Kirra, Narn and Tarni. Include images, words or phrases, and mannerisms that show each character's personality.
- Rhetorical Refresh: Simple literary devices
 - **Alliteration**: when you use a series of words that all start with the same letter or sound and are used in quick succession to describe something.
 - Use it to add a pleasing cadence when you describe an action or a setting.
 - Find an example on page 46. [Answer: 'Perfect power. Trained timing.']
 - Students write examples of alliteration.
 - **Similes**: when you describe a subject by comparing it to another subject or object by using 'like' or 'as'.
 - Find an 'as' example on page 3. [Answer: 'I'm as thankful as a vegan winning a meat tray ...'] Is Kirra thankful?
 - Write a simile (using 'as') that shows she is thankful.
 - Find a 'like' example on page 18. [Answer: 'My heart speeds up like two boomerangs clapping together, faster and faster as the dancing ceremony comes to an end.']
 - Write a simile (using 'like') to show emotion.
- Rhetorical Refresh: Complex literary devices
 - **Epistrophe**: when you repeat the last word/s in three or more successive phrases or sentences.
 - Use an epistrophe to raise tension, but don't overuse it, as it will dilute its power. Read it aloud and clap out its syllables. It needs to sound right (and be cadence-driven).
 - Find an example on page 7. [Answer: 'The room is still. Uncomfortably still. Unnaturally still. And I've got fifty-one minutes to prove I'm not cracked.']
 - Students write examples of epistrophes.
 - **Zeugma**: when you place two or three nouns with different meanings in the same position in a sentence. The last word is a bit of a surprise as it doesn't fit the rational order. It works well with alliteration.
 - Use a zeugma when you want to create impact. Read it aloud – it needs to sound right (cadence-driven).
 - Find an example on page 106 [Answer: 'Wanjellah scurries into the bush, his back burdened with water and weapons and worries.']
 - Students write examples of zeugmas.
- Create a **book review** for *The Upwelling*. This could be in the form of a podcast, TV presentation, or print.
- Lights. Camera. Action: Students produce a **book trailer** for *The Upwelling*.
- **Pick the protagonist**: There are three main characters in *The Upwelling*, yet only one protagonist. What is a protagonist? Who is the protagonist? Though all the main characters in this book drive the plot, chase a goal and change over the course of the book, the main characters make readers understand the protagonist more. Find examples of this in the text to prove who the real protagonist is.
 - 'If my plan works, today's session will be different: life-changing different. And if the truth can't convince them, I'll surrender to their lies.' (page 3)
 - Why would Kirra want to 'surrender to their lies'? Have you found it easier to go with the flow and not fight for your truth? When? How? What advice would you give Kirra if she were your sister or close friend?
 - Is there any time it's okay to surrender to someone's lies? Explain why or why not.
 - Write examples of when Kirra stands up for herself and when she doesn't.
 - Kirra thinks the truth doesn't set her free. Why? What happens to make her realise her mistake? Are there any times you've made a mistake on what was true? Is truth (like beauty) in the eye of the beholder? Discuss why and how this can help you see someone else's truth.

CLASSROOM IDEAS - ENGLISH (continued)

- In Aboriginal and Torres Strait Islander cultures, we have **circular storytelling**, which can be told from any time and has no starting or ending point. Yet, the Western storytelling method is linear: a beginning, middle and end.
 - Non-linear storytelling means different members of a tribe are knowledge holders of a piece of the story, and it's important to connect to all the other knowledge holders to understand the whole story and to ensure the story doesn't get lost.
 - Find examples of circular storytelling in the text. Show who has a part of a story and needs another part/s to understand the bigger picture.
 - *The Upwelling* consists of both linear and non-linear thinking and storytelling. Use examples from the novel to show this.
- **N'gian's symbol:** On page 14, Kirra thinks the N'gian symbol means this: 'Maybe that symbol, a barrelling wave and a sun made from a "meeting place" sign, is Wuz's last barrel, and it's trapping me in the past. I need to let him go.'
 - What does it really mean by the end of the book? Does it have more than one meaning? What do the different elements of N'gian's symbol mean? How is each element linked to each main character?
- **Overused expressions and outstayed clichés:** Writers endeavour to cut out clichés. Why? Because it makes readers skim, which could pull them out of the story – the opposite of a page-turner. We want to keep readers engaged, so there are two ways to tackle clichés and overused expressions.
 - 1) Instead of cutting out clichés, we can give it a fresh spin instead. We take the underlying meaning and write it in a new way.
 - On page 7, find where the author rewrote the cliché 'the lights are on but nobody's home' in a fresh way. ['The wi-fi's on but there's no internet.']
 - The author's primary school teacher would use the cliché 'blind Freddy could see it'. On page 7, how was this cliché reworked? ['Her ploy is obvious, a blind pimple could see it.']
 - 2) Instead of cutting out a cliché, we can twist it. This is where readers see the 'base' cliché but writers amplify or use it in a unique way.
 - On page 364, where has the cliché 'beauty is in the eye of the beholder' been twisted? ['What if truth, not just beauty, is in the eye of the beholder?']
 - Find the cliché twist on page 105 based on 'slow as a snail'. ['We shuffle through the rainforest at the speed of a baby snail who ran out of slime.']
 - 3) The author keeps a notebook just for fresh spins/cliché twists. Have fun with the following exercise. The first page in Lystra's notebook is titled 'Stick out like a sore thumb'. And none of these suited *The Upwelling*.
 - Stick out ... like a unicorn on a cowboy's ranch.
 - Stick out ... like a steak in a vegan's kitchen. (But this led to 'I'm as thankful as a vegan winning a meat tray' on page 9.)
 - Stick out ... like a pink, glittery tutu at a funeral service.
 - Stick out ... like a fart in a perfume store.

CLASSROOM IDEAS - ENGLISH (continued)

Pick as many of the following cliché list as you like (or choose your own), and give it a fresh spin or use a cliché twist:

- a kid in a candy store
- fish out of water
- I'll cross that bridge when I get there
- the wrong side of the bed
- dead as a doornail
- good things come to those who wait
- every rose has its thorn
- the apple doesn't fall far from the tree
- the grass is always greener on the other side
- if only walls could talk
- you can't judge a book by its cover
- plenty of fish in the sea
- what goes around comes around
- to throw someone under the bus
- once bitten, twice shy
- making a mountain out of a molehill
- don't cry over spilled milk
- you win some, you lose some
- read between the lines
- better safe than sorry
- low-hanging fruit
- a bee in your bonnet
- a bull in a china shop
- taste of his own medicine
- back to the drawing board
- bite off more than you can chew
- blow your own trumpet
- can't teach an old dog new tricks
- cat got your tongue
- don't count your chickens before they're hatched
- don't hold your breath

- What does **'show, don't tell'** mean? By showing a character's actions to convey their feelings, the writing brings readers closer to the character instead of just telling the reader what happened.
 - Example on page 13 (as well as a cliché twist): 'Nan's eyes – if looks could really kill, there'd be a massacre.'
 - Find five examples where the author 'shows' instead of 'tells'.
 - Write your own examples.
- Show, don't tell' is a way to keep readers engaged, but some 'show, don't tell' phrases can be overused. A smile shows you're happy, but the way a smile is described can be clichéd. For example, 'She gave him a toothy grin', 'He grinned like a Cheshire cat', 'She beamed from ear to ear', 'He broke into a smile', 'She flashed a smile', 'He cracked a smile', '... forced a smile', '... gave a smile'. Sometimes, smiles are described quickly to keep the pace moving. Other times, we need slow the pace down and amplify the emotion, by drawing out how we describe the smile in a unique way.
 - Throughout *The Upwelling* are examples of how to pizzazz up smiles:
 - 'A smile pops on her face like an emoji on a screen.' (page 3)
 - 'He sheds a snake-skin smile.' (page 188)
 - 'Her sweet-syruped smiles create cavities in my teeth.' (page 240)
 - Explain the above description of smiles and the emotion each depicts.
 - Find three more examples of smiles in the text. [Hint: pages 3, 5, 7, 77, 85, 168, 218.]

CLASSROOM IDEAS - ENGLISH (continued)

- **Character arcs:** pick either Kirra, Tarni or Narn. What is this character like in the beginning (see theme notes)? How do they change by the end of the book? For example, on page 10, Kirra says, 'Wish I could leave the Gold Coast – been here my whole life, and I'm tired of GC people and places.'
 - What does Kirra say in her last chapter to show how she's changed, which is the opposite of this? What does the author write to 'show, don't tell' how Kirra feels about being back in the GC? [Hint: 'It's like I've gobbled a packet of popcorn kernels, and they're exploding in my tummy. I've missed the GC: the people and the place.' (page 368)]
 - Use examples from the text to show how either Kirra, Narn or Tarni has changed from the beginning to the end of the book.
- Take two A4 pages and create a **word web** on each (page 1: Modern Australia; page 2: Pre-colonial Australia). Use the text to write how Kirra describes modern Australia when she returns to the Gold Coast vs. pre-colonial Australia. Categorise them under the five senses. List descriptions on each word web. Add to this list as you read the text.
- In the role of Kirra, write a reflection about your dream and its meaning.
- Retell a scene, moment or event from *The Upwelling* in the form of a poem. For example, the battle between the Malung and N'gian, collecting flowers for sweet water or making fire.
- As you read *The Upwelling*, discuss aspects of Aboriginal culture evident throughout the text.
- Yugambah language has been integrated into *The Upwelling*. Why is this done? Does it give you a sense of how Kirra feels entering Wallulljagun? Use the glossary and find terms used in most Indigenous communities.

CLASSROOM IDEAS - SCIENCE

- Using evidence from the text, create a six-season calendar for Yugambeh-speaking Country and/or the Indigenous nation your school is on.
- Invite a local Indigenous Elder/community member to talk about local plants and bush medicines or the season you are currently in and what that means.
- Research medicinal plant properties (or bush medicines) found in *The Upwelling*. Create a chart that includes where the plant grows, when it flowers and any medicinal or food element of each part of the plant. Write the Yugambeh word, another Indigenous language/word for it (where your school is based), common name/s and scientific name for each plant species. For example, Yugambeh: *bilang*. Scientific name: *Casuarina equisetifolia*. Common name/s: Coastal She-oak or Horsetail She-oak. The bark is used to heal mouth sores. Pine needles are used for bedding or to place *jarjum* on to protect them from snakes.
- What is the scientific definition of upwelling? Rewrite it using layperson's terms. Write the Yugambeh term for the upwelling. Find examples in the text from two different characters that show this. [Hint: pages 65, 344, 355.]
- *The Upwelling* has many scientific elements: firestick farming, astrology, agriculture, animal training and geology (sandstone to make ochre). Choose one of these ancient sciences and research more. Write a persuasive speech about why Western systems should use Indigenous scientific knowledges. [See reference list.]
- Totems: a biologist's heart. Look up totems in the glossary. Choose an animal, plant or element (fire or ocean) from your area. Think of something you can connect with. For instance, you were born in the same month, or an animal that regularly visits your home. Choose it as your totem. Research everything about it: its call/sound, breeding season, what it eats, where it lives, etc. Track the animal's population numbers: Are they flourishing or becoming extinct? Are there non-native predators? Report your findings. In your conclusion, explain ways to help your totem keep in balance with the *jagun* and other living things.
- Research moon phases. Map out moon phases throughout the text. How are moon phases connected to Country? If the moon were your totem, when would someone need your advice about it or permission to use it? What knowledge would you hold regarding this totem? What would you need to pass on to *jarjum* to keep them safe? Write a letter (as the moon's knowledge-holder) to pass on the moon and its connection to Country. Find out what the moon is called in one or more Indigenous Australian languages (remember this includes Torres Strait Islander languages).

CLASSROOM IDEAS - SCIENCE (continued)

Geophysicist Dr Chris Yule explains how to destroy the world using rocks and energy!

Q&As with the brainiac Dr Chris Yule, geophysicist and one of the non-Indigenous consultants for *The Upwelling*. [See Author's Note and Acknowledgements on page 381 for more consultants and the thank-you note to Dr Yule.] Use the following Q&A to write scientific reports on supervolcanoes, global climate change or groundwater.

Also, though Dr Chris is undeniably friendly, kind and super-passionate about science (and all forms of 'rock' – including the music), feel free to imagine him stroking a snarky black cat or having a high-pitched villainous laugh after every comma, full-stop and question.

Question 1: When Lystra needed expert advice on destroying the world in pre-colonisation, what was your answer?

Dr Chris: My immediate thought went to supervolcanoes. During my research, I learned about a volcanic event that caused the greatest mass extinction in Earth's history, the end Permian mass extinction 250 million years ago. Fossil evidence suggests this eruption wiped out more than 90% of all life at the time, and it was primarily caused by a volcanic system called the Siberian Traps System. These supervolcano eruptions send large volumes of ash into the atmosphere that can block the sun and cause rapid global climate change, which is hazardous for most life. With the absence of modern technology that we typically think would end the world (nuclear bombs, rogue AI, out-of-control robots, etc.), I thought it would be cool if the story's villain could be a threat by intentionally causing a supervolcano to erupt!

Question 2: Are there any resources you could recommend to high school students to learn more about this?

Dr Chris: Geoscience Australia (Australia's federal government agency responsible for all things geoscience and where I currently work) has many learning resources, including this one about volcanoes: <https://www.ga.gov.au/education/classroom-resources/hazards/natural-hazards/volcano>. Videos on YouTube, including Ted Ed, do a fantastic job illustrating how volcanoes work and the consequences of supervolcanoes: https://youtu.be/hDNlu7Qf6_E. For students keen to learn more, I recommend using Google Scholar to search for scientific papers that feature volcanoes, supervolcanoes and hotspots. For example, here is a paper I recently published: <https://doi.org/10.1029/2021GC010030>. Learning how to read scientific papers is important

because it is one of the best ways to source primary information.

Question 3: From a geophysicist's point of view, why is it important to base stories on scientific truths?

Dr Chris: This is a great question! Having an element of truth or using science in fiction can help the story feel more real. Being immersed in a good fictional story can require 'suspension of disbelief' where the events are plausible to the reader. However, nature can be very unusual, and science can often look like fiction! Integrating science with stories is a great way to share knowledge and educate a lot of people who might not like learning from a textbook. Scientists are now trained to write their research as stories or through narratives to make their findings more accessible and engaging. This shows fiction can benefit from science, and science can benefit from fiction!

Question 4: As a geophysicist, if you could travel back into Kombumerri Country as Kirra did, what would you do/study/research?

Dr Chris: This would be a fascinating experience (and I would definitely look like a ghost!). As a geophysicist, I am passionate about Earth's hidden features under the ocean and underground. In this scenario, I would choose to study groundwater. Groundwater is water that flows through underground river-like systems called aquifers. We often think of rocks as solid objects, but sedimentary rocks like sandstone are full of holes called 'pores' that allow water to percolate through them. Researching and mapping groundwater is important because they are sources of fresh water, and I imagine that would be useful to know when water becomes scarce. Many Aboriginal nations understand groundwater systems across various countries and mapped them using art. It is more than likely I would be learning more than teaching. I wonder if the wave portal would work for my bodyboard.

CLASSROOM IDEAS - HISTORY/ABORIGINAL & TORRES STRAIT ISLANDER PERSPECTIVES

- There are Yugambeh words throughout the novel. Imagine not having a glossary to refer to. How would Kirra feel being fully immersed in this language for the first time? Students should draw from their experience of trying to understand and remember these Yugambeh terms while they read the text. Write a diary from Kirra's point of view of life before colonisation.
- On page 98, Tarni gets annoyed with Kirra's Western way of learning: 'For Kirra, questions seem to be how she learns.' How is this different to Tarni's way of learning?
 - On page 18, Narn states, 'There is time for questions and time for silence.' Think about the different learning environments (pre- and post-colonisation). Discuss with a partner when questions/silence would work in Indigenous culture, then when/how it would work in modern society.
 - Learning by 'watching and listening' could save your life. List examples of when this could save your life in your school environment, home environment, or if you time-slipped into Wallulljagun.
- **What is the Dreaming?** Draw a Venn diagram to show the similarities and differences between the Dreaming and another religion, e.g., Christianity/Heaven.
- Invite a local Indigenous guest speaker. Learn some words from the local language where your school is for plants and animals, then create a glossary.
- **Discuss stereotypes** and how Nan's tea analogy can help stop stereotyping First Nations people and their skin colour.
- On page 2, Kirra mentions how Boundary Street marks every town's segregation lines. Research which cities and towns have a 'Boundary' street/lane/road in Australia.
 - Research when a First Nations person could cross a street or road called 'Boundary'. Did they need permission? How was this obtained? Could they travel freely to see children, work or buy food? When did this stop?
 - Write a diary entry from a First Nations person who needed permission to cross Boundary Road. How would you feel? What would your worst day look like? After you've written that diary entry, what kind of trauma would be associated with roads called 'Boundary'? What are some solutions to de-traumatise these places? How could you make this change happen? What could you do? How can you practically play a role in reconciliation with First Nations peoples? If you are an Indigenous Australian, how can you instigate change regarding a 'Boundary' street/lane/road? What would help reconciliation? What could hinder reconciliation?
 - Write a persuasive essay/speech discussing if we should eliminate the name 'Boundary'. Should this be a part of reconciliation and moving forward as a nation?
 - In the past (especially during the Stolen Generations when Indigenous children were taken from families and placed in dormitories – watch the movie *Rabbit-Proof Fence*), the government stopped Indigenous Australians from speaking language and practising culture. Discuss how that could impact your identity. How can we support language and culture in this day and age? What would that look like, feel like, sound like? Use examples to describe ways you could support language and culture in a respectful way? What would the wrong way look like?
- Some Dreaming stories are shared between tribes or can travel vast distances over coastlines. Give an example of a Dreaming story unique to one place. Find an example of a Dreaming story shared by many tribes. [Hint: one has a dolphin, one has an emu. (Which tribes use Dark Emu or Emu in the Sky?)]
- Use a Venn diagram to show the similarities and differences between a Yugambeh-speaking nation and another Indigenous nation. Research and add to the diagram customs, Dreaming stories and use of Indigenous words/terms/languages.

CLASSROOM IDEAS - GEOGRAPHY

- Maps: create a map of Wallulljagun – the area where Kirra, Narn and Tarni travel to.
 - Make sure you include these common elements on your map: title or heading, key or legend, scale and orientation indicators, grid, inset map, compass rose or north arrow and source notes or credits.

CLASSROOM IDEAS - VISUAL ARTS

Lystra Rose is a self-professed professional ‘finger painter’.
[Professional whistler was already taken.]

- Use fingerpainting as the base of your art. Then layer with elements of plants, symbols and animals you'd find in the Indigenous nation you live on or your school resides on.
- What is a dinkus? The author designed the dinkuses found throughout the book. Think of an element or symbol to redesign the dinkuses in the *The Upwelling* if the book was based where you live.
- Create a graphic novel based on *The Upwelling* or a scene from the text.
- Choose a descriptive passage from the text to illustrate, for example, Narn swimming through the cave (page 16).

CLASSROOM IDEAS - DEVELOPING EMOTIONAL INTELLIGENCE

- On page 280, 'A whisper can be as loud as a shout, it's about clarity.'
 - What does this mean? How does it relate to emotional intelligence?
 - Can you think of a time when you felt something so strong it could seem loud? That is, it was really clear and you knew it strong in your gut – your instinct. You felt it with every fibre of your being.
 - Is it easier to feel a bad vibe about someone or something than a good vibe? Discuss why and what happens if you ignore a bad vibe.
- On page 368, 'Culture is within us. We're born with the lore of this land.'
 - Discuss nature vs. nurture and how culture could be genetically passed on.
- Part of emotional intelligence is empathy. Find examples in the text where a character lacks empathy and how they learn it. Reflect on your life – when going through something tough helped you develop empathy.
- On page 356, 'It's our duty to maintain oneness.'
 - What does this mean? Is this relevant for everyone (all humans)? Why or why not?
 - Does playing a role in your family and community help or hinder this? Discuss the pros and cons of maintaining oneness in modern Australia.
- See note on the characters' main theme. What did each of the main characters find out about themselves to discover their purpose? Do you need conflict or hardship to discover your purpose? Why or why not?
 - The more you know yourself, the more you'll know your purpose. Do you agree or disagree? Find/discuss how this happens for each main character. Is this reality for today's youth? If it is, what would this mean a person should do to know their purpose or role or job? How would they know themselves? Is this something that should be done in isolation, in a family/community or both? Discuss why.
 - Do you need to know your strengths and weaknesses to do this? How can a 'weakness' or 'perceived weakness' help each character find his/her purpose? Let's apply it to your life. Think how a weakness could be flipped into a strength to help you find your purpose (or destiny). Like Tarni, the author is a perfectionist – was deemed fussy, too particular or thorough on certain projects. However, this so-called weakness is the exact weapon or strength that is needed to be an editor! Write a private journal to find weaknesses and flip them. It could lead to your perfect job.
- On page 356, 'But it takes a community to help you know and grow.'
 - Do you agree? How can a community help you grow? When could a community hinder growth? What would you need to be aware of when being part of a tight-knit community and wanting to grow?

THANK YOU

Dear Educators,

As a qualified teacher, I understand the stressors that impact the classroom environment. I am thankful for educators, like yourself, who prepare and motivate young people to embrace a fulfilled future because they've learnt who they are, what they're good at, and can pursue their unique purpose.

Without texts and teachers, how else can young people call adults to account and leave the world a better place? How else can young ones grow strong minds and value emotional intelligence? And how else can this next generation become tomorrow's truth writers?

Eso (thank you in Torres Strait Islander language) for your investment into tomorrow's truth writers.

Lystra
Rose

APPENDIX:

LINKS TO THE AUSTRALIAN CURRICULUM

Year Level

Curriculum Area

Year 7

English | Literature

- Identify and explore ideas and viewpoints about events, issues and characters represented in texts drawn from different historical, social and cultural contexts ([ACELT1619](#))
- Compare the ways that language and images are used to create character, and to influence emotions and opinions in different types of texts ([ACELT1621](#))
- Recognise and analyse the ways that characterisation, events and settings are combined in narratives, and discuss the purposes and appeal of different approaches ([ACELT1622](#))
- Discuss aspects of texts, for example their aesthetic and social value, using relevant and appropriate metalanguage ([ACELT1803](#))

HASS

- The nature of the sources for ancient Australia and what they reveal about Australia's past in the ancient period, such as the use of resources ([ACHASSK170](#))

Language Awareness

- Understand and apply cultural norms, skills and protocols associated with learning, using and researching Aboriginal and Torres Strait Islander languages ([ACLEFWU192](#))

Science | Understanding Earth and Space

- Predictable phenomena on Earth, including seasons and eclipses, are caused by the relative positions of the sun, Earth and the moon ([ACSSU115](#))

Visual Arts

- Experiment with visual arts conventions and techniques, including exploration of techniques used by Aboriginal and Torres Strait Islander artists, to represent a theme, concept or idea in their artwork ([ACAVAM118](#))

Year 8

English | Literature

- Explore the ways that ideas and viewpoints in literary texts drawn from different historical, social and cultural contexts may reflect or challenge the values of individuals and groups ([ACELT1626](#))
- Create literary texts that draw upon text structures and language features of other texts for particular purposes and effects ([ACELT1632](#))
- Explore the interconnectedness of Country/Place, People, Identity and Culture in texts including those by Aboriginal and Torres Strait Islander authors ([ACELT1806](#))
- Recognise and explain differing viewpoints about the world, cultures, individual people and concerns represented in texts ([ACELT1807](#))

History

- Identify a range of questions about the past to inform a historical inquiry ([ACHHS150](#))

Language Awareness

- Understand and apply cultural norms, skills and protocols associated with learning, using and researching Aboriginal and Torres Strait Islander languages ([ACLEFWU192](#))

Geography

- Spiritual, aesthetic and cultural value of landscapes and landforms for people, including Aboriginal and Torres Strait Islander Peoples ([ACHGK049](#))

APPENDIX: (continued)

LINKS TO THE AUSTRALIAN CURRICULUM

Year Level	Curriculum Area
Year 8	Visual Arts <ul style="list-style-type: none">Experiment with visual arts conventions and techniques, including exploration of techniques used by Aboriginal and Torres Strait Islander artists, to represent a theme, concept or idea in their artwork (ACAVAM118)
Year 9	English Literature <ul style="list-style-type: none">Interpret and compare how representations of people and culture in literary texts are drawn from different historical, social and cultural contexts (ACELT1633)Reflect on, discuss and explore notions of literary value and how and why such notions vary according to context (ACELT1634) English Literacy <ul style="list-style-type: none">Explore and explain the combinations of language and visual choices that authors make to present information, opinions and perspectives in different texts (ACELY1745) Historical Knowledge and Understanding <ul style="list-style-type: none">The short and long-term impacts of the movement of peoples during this period (ACDSEH085) Language Awareness <ul style="list-style-type: none">Understand and apply cultural norms, skills and protocols associated with learning, using and researching Aboriginal and Torres Strait Islander languages (ACLEFWU192) Science Understanding Earth and Space <ul style="list-style-type: none">The theory of plate tectonics explains global patterns of geological activity and continental movement (ACSSU180)
Year 10	English Literature <ul style="list-style-type: none">Compare and evaluate how 'voice' as a literary device can be used in a range of different types of texts such as poetry to evoke particular emotional responses (ACELT1643)Evaluate the social, moral and ethical positions represented in texts (ACELT1812) English Language <ul style="list-style-type: none">Understand how language use can have inclusive and exclusive social effects, and can empower or disempower people (ACELA1564) History <ul style="list-style-type: none">Continuity and change in beliefs and values that have influenced the Australian way of life (ACDSEH149) Geography <ul style="list-style-type: none">The environmental worldviews of people and their implications for environmental management (ACHGK071)The Aboriginal and Torres Strait Islander Peoples' approaches to custodial responsibility and environmental management in different regions of Australia (ACHGK072) Language Awareness <ul style="list-style-type: none">Understand and apply cultural norms, skills and protocols associated with learning, using and researching Aboriginal and Torres Strait Islander languages (ACLEFWU192)

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