



Relational resilience to climate change: A guide for educators

When thinking about climate adaptation

and resilience, we often think of the physical preparedness measures. Clearly, keeping children safe in a heatwave or flood is a priority, but what about those situations we can't predict? Community cohesion and inner resilience is key.

To develop this, young people need **supportive, stable adults** to help them weather difficult times, and to learn and thrive. They need to be shown how to think for themselves make sense of complex and fast changing situations.

This guide for educators, written by an Educational Psychologist and ex-science teacher, will talk you through the developmental importance of relationships between youth and adults (be they parents, teachers, or other 'adult influences') and the crucial role that these intergenerational relationships play in society. It considers how strong 'attachment' relationships can be the vehicle through which children learn the inner resilience and cognitive flexibility to adapt to what life throws at them.

Practical strategy recommendations for sustaining and nurturing these relationships are made throughout.



Secure attachment figures:

- Keep the child safe
- Allow for exploration
- Delight and enjoy in the child
- Make allowances for and help progress their developmental stage
- Soothe and validate their feelings
- Act as a 'secure base' for comfort



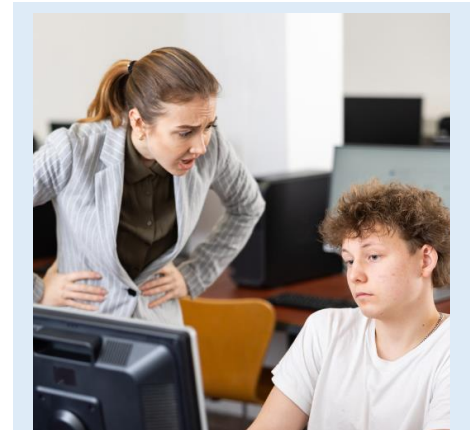
Why does attachment matter?



The importance of nurturing relationships, or 'secure attachments' with adults, is a well-known factor affecting resilience and coping skills for children and young people. It helps in the development of good **self-esteem, problem-solving and interpersonal skills.**

Although the original understanding of attachment theory came from observations of babies and their mothers, the need for attachment relationships extends right through adolescence into young adulthood.

Even in secondary and higher education, **the educator (as the replacement authority figure), makes a big difference to a student's sense of security** and ability to learn.



If a student is worried about getting shamed in class, they are less likely to take risks with their learning and may have trouble concentrating.

When anxious, they may engage in disruptive behaviour rather than seek support.



Compromised attachments and society

The term '**adverse childhood experiences**' refers to traumatic life stressors, (e.g. parental ill health, abuse and addictions) which affect the attachment relationship and therefore the wellbeing of the young person. The impacts of poverty and climate change stressors only increase the likelihood of adverse childhood experiences.



With more and more Western families adopting a 'nuclear', more isolated family unit, the chances of having 'back up' supportive relationships (as in close communities and tribal societies) is reduced.

For some students and young people, educators may be their only opportunity to form positive, healthy attachment relationships.

Young people missing the guidance and support of a secure adult at home or at school will instead turn to bond with peers (often online).



Peer-attached youth can become more vulnerable to exploitation and risky behaviour, with an excessive focus on 'fitting-in' (Neufeld & Maté).

When these relationships go wrong, peer altercations and rejection can harm mental health and increase the risk of suicide (e.g. Cheek et al., 2020).

It's not enough to let children support each other. Secure intergenerational attachments are needed to develop educated, resilient citizens who can take smart decisions and work together under difficult circumstances.



Intergenerational attachments are important for a functioning and stable society.





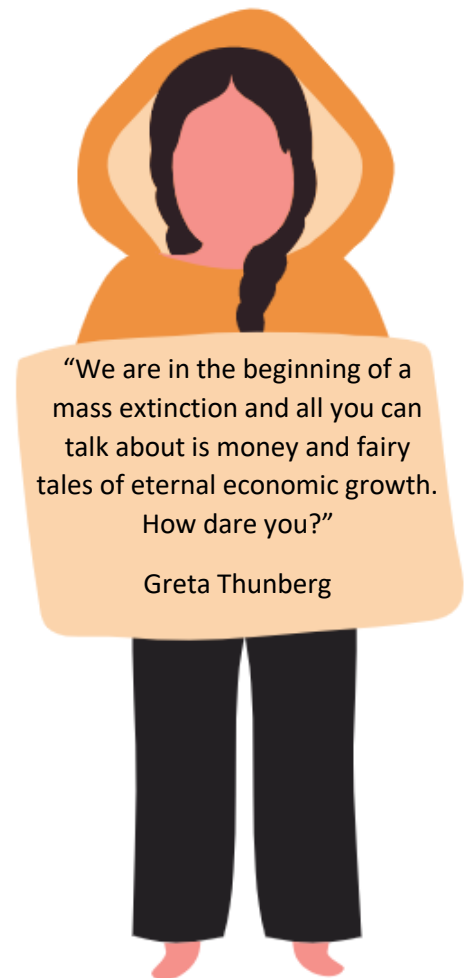
Intergenerational rift risks

The direct impacts of climate change including: bereavements, food scarcity, property loss, and increased aggression, represent a potential rise in adverse childhood experiences, which compromise secure intergenerational attachments.

Many young people are rightly angry at 'older generations'. Even for those not yet severely affected there is a feeling that the 'problem' of climate change has been passed onto young people, while the wealthier older generation reaped the benefits of the economic boom afforded by the plentiful supply of fossil fuels (United Nations development programme, 2019).

The majority of 16-25 year-olds surveyed in the UK and globally (Hickman et al., 2021) now report feelings of mistrust, being disregarded, betrayed, and let down over climate change by those that are supposed to safeguard them - elders in power.

A failure to limit global warming therefore amounts to betrayal of the attachment agreements between young people and the 'elders'- at mass scale.



In the face of climate crisis, we must redouble our efforts to nurture and sustain strong intergenerational bonds.





THE MOVEMENT TO NOT HAVE CHILDREN OWING TO FEARS OVER CLIMATE CHANGE IS GROWING AND IMPACTING FERTILITY RATES QUICKER THAN ANY PRECEDING TREND IN THE FIELD OF FERTILITY DECLINE

MORGAN STANLEY ANALYSTS
CITED IN THE WASHINGTON POST (OSAKA, S., 2022)

The (anti) natalist debate

The climate and ecological crisis is also affecting how young people see their future and life choices.

Young people are increasingly reporting feelings that it would be unfair to bring children into a world with so much suffering from possible future climate impacts. More and more young people are deciding not to have children.

The decline in birth rates also raises the question over the future care needs of an aging population. Is it reasonable to expect young people to pay for care of a large elderly population, when these 'elders' haven't all cared for the planet young people have inherited?



There are no easy answers to these difficult questions, but being aware of these tensions, and curious about others' views is the starting point having meaningful and supportive conversations with young people.

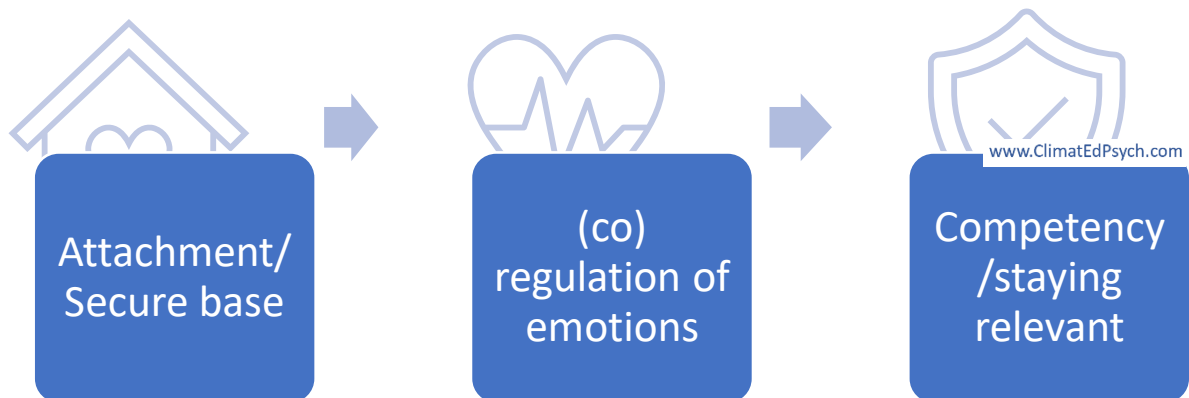




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Restoring and maintaining intergenerational attachments



The broader 'ARC' framework for trauma re integration, ('attachment, regulation, and competency' Arvidson et al., 2011), provides a helpful framework to consider ways to try to repair and restore our attachments when climate concerns threaten intergenerational relationships.

1. Attachment: restoring the physical and relational 'secure base'

The primary need of physical safety is threatened by climate impacts and must be addressed for young people to feel securely attached to those caring for them. Children and young people **need to see** responsible adults taking action on climate mitigation and adaptation, not just handing the problem over to them.

They also need relational safety - the ability to express their emotions, without the adult becoming overwhelmed.



INSTEAD OF:



**"YOUR GENERATION
WILL SAVE THE PLANET"**

TRY THIS:




**"WE ARE ALL WORKING TOGETHER
TO ADAPT AND MAKE
SUSTAINABLE CHANGES"**





Recommendations: Attachment security

Physical Security:

- 
- Publish, share and celebrate the school's Climate Action Plan. This should be based on surveys and a review of local needs, listening to the community, staff and student body. The School Sustainability team should include senior leaders and a member of the estates team, in a whole school approach.
 - Take realistic measures to combat direct climate impacts in your area (adaptation) e.g. installing blinds for heat waves, checking trees for sign of disease and storm vulnerability, install flood defences.
 - Schools may wish to consider implementing online learning systems as a back up for inclement weather or consider a flash flood/ wildfire smoke 'drill'.
 - Share climate event plans with children, so they can be confident that they will be ok in the event of difficulty.
 - Climate Action Plans should be clear about ways in which the school is decarbonising its buildings, supply chains and infrastructure. Share and celebrate this with pupils as it will help reassure students that school is taking action to safeguard their future.

Relational security ('How to talk with children about climate change'):

- Work on your own climate emotions to be able to 'hold space' for children and young people - so you don't get overwhelmed too.
- Stay engaged in the topic and aware of any tendency to slip into avoidance or denial of the urgency climate action, seeming to be disengaged can be quite upsetting for children.
- Invite and make time for conversations about climate change. Be sure to return to the conversation later if they raise a question when you're busy.
- Ask children what they know and engage in a fact finding mission together if there is something you're not sure of.
- You might want to build a conversation around something that's on the news or raised in their school or media feeds.
- Schools may wish to set up a 'climate questions box' or regular 'climate cafes' for young people to share feelings. more details: info@climatedpsych.com.



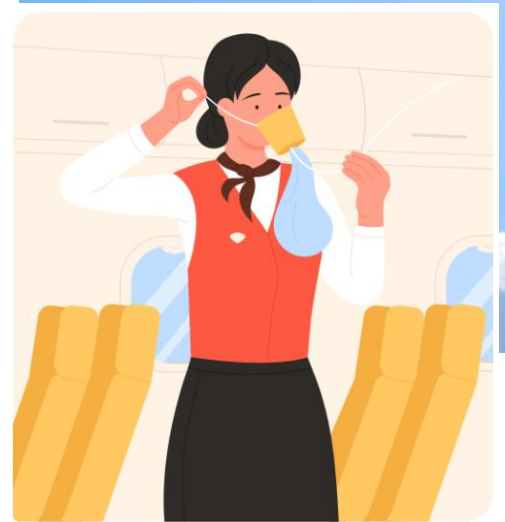


2. (co) Regulation of emotions: holding space for feelings

The oxygen mask principal states that we need to help ourselves before we can be a help to others. So, as well as being able to listen calmly to climate concerns from young people ('attuning' to their needs), it would be helpful for adults have their own emotional regulation practices that they can share and model for children and young people.

This would hold for any crisis but the inherent injustice of climate change requires adults to go a step further. The young and old are not 'in the same boat' and this needs acknowledging.

Even better, adults who are able to assume responsibility and apologise for their part in climate change have a chance of meaningful reconciliation with the young people they care about.



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I'm sorry .
Please forgive me
· Thank you
I love you .

Ho'Oponopono - Traditional Hawaiian practice for reconciliation



As well as the coping strategies for eco emotions, adults can 'attune' to a young person's emotional needs and help with regulation through an approach known as Emotion Coaching (Gottman et al. 1996).

Emotion coaching steps



The idea is to communicate unconditional positive regard and acceptance of all feelings. Then to help the students understand and label the feeling, before working together on a constructive solution.

eco-emotion coaching examples

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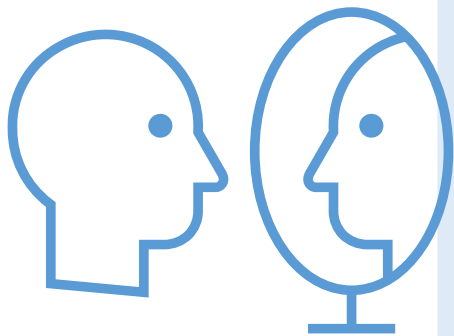
"I understand why you're angry, I feel angry too. It's ok to feel angry. Trouble is that it's not ok to hurt other people. Instead, we can use anger to take action. Shall we write to the Head teacher? post something online? What do you think?"

"I wonder if that news headline is making you feel anxious? It's normal to feel worried when we don't know what's going to happen. You're still allowed to enjoy your life and have fun though... what could we do differently as a school that would help?"

"I can see you seem really down about the loss of wildlife. Is it maybe a sadness or grief for over something you care about? You have a beautiful heart and it's ok to cry... Are there other animals species that you think need protecting?"



Recommendations: (co) Regulation



Emotional attunement:

- Apply the principles of **emotion coaching** in interactions with children and young people. Pay attention to young people's behaviour - disruptive behaviour is often a cover for anxiety or sadness.
- **Pay attention to your own responses** to 'big' feelings e.g. does a young person's anger make you feel defensive? There might be a need for some staff training in eco-emotions and support for self-regulation (see www.climatedpsych.com - services)
- **Acknowledge the generational injustice** of climate impacts, and take responsibility for your part. If you can, apologise.

Emotional regulation :

- Share and **model your own eco-emotion coping strategies** and help children find what works for them.
- Have **calming exercises and time in nature** as part of your regular routine with students, so that they know what to do in the moment. Older pupils may be able to engage in practices of 'sitting with feelings' without trying to make them 'go away'.
- Be mindful that those children who have insecure attachments, experienced **previous trauma** or adverse childhood experiences may become **distressed more easily**. Check in with them more often.





3. Competency: Staying relevant

It may be tempting to protect children

from knowledge of climate change; we instinctively want to protect children from distress, especially when we are worried and upset ourselves.

However, given the widespread media coverage, this is not only impossible, but also unfair, as children and young people have the right to know about threats to their lives, to have a voice and be involved in protecting themselves.

It is inevitable that they will find out the reality (or the lies) of climate and ecological breakdown from somewhere. This is best coming from the adults they know and trust,



The climate psychologist Caroline Hickman (2019) uses the analogy of a seedling compost requiring 'just enough grit to grow'. Without some hard truths, children will have weak roots and not thrive in the real world. Too much too early and they will not be able to grow roots in the first place.



Young people need help to discern the truth of our complex and messy systems in bite-sized chunks, delivered sensitively and age-appropriately. We can then work with young people to reimagine new systems for the solutions to climate change.


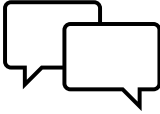

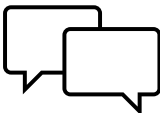




What is age-appropriate?

Below are some suggested nature connection, climate wellbeing, systems, psychology and justice activities and ways of talking, for children of different ages.

Every child is different - the best approach is to meet the child 'where they are at'. Students with a history of trauma or special educational needs may need a more tailored approach.

Age in UK school system	Suggested activities	Suggested scripts/ language for 'climate truth' - to adapt your own voice
<p>Pre school and reception</p> 	<p>Focus on daily activities (e.g. walk instead of the car, litter pick, recycling bins, using both sides of the paper).</p> <p>Normalising sustainability in family and school life, talking about health benefits. Normalising care for all animals and the environment (e.g. not killing bugs).</p> <p>Success stories of animals in their ecosystem (e.g. reintroduction of wolves to Yellowstone Park & impact on ecosystem)</p> <p>Outdoor learning & biodiversity - e.g. insect counting, pond dipping. Discussing threats to ecosystems and what can be done to protect (e.g. don't use pesticides because it can kill bees)</p> <p>Art with nature (e.g. leaf rubbing, flower crowns).</p> <p>Nature for sensory play and relaxation e.g. walks, tree climbing, cloud spotting, sand play, water play. Encourage children to notice how they feel.</p>	 <p><i>"We need to care for the planet so the weather stays calmer. Big storms, very hot summers, or lots of rain makes life harder.</i></p> <p><i>Driving cars and planes and making new things makes gases which are like a blanket for the earth.</i></p> <p><i>We're all working to make changes to slow down the earth getting hotter, as this affects the weather. This is actually going to make us healthier, too".</i></p>
<p>Key stage 1</p> 	<p>As above, and:</p> <p>Involvement in and visits to sustainability and biodiversity solutions (e.g. solar panels, wind turbines, EVs, rewilding projects, regenerative agriculture farms).</p> <p>Stories and case studies of social change and environmental solutions (e.g. ozone layer).</p> <p>Learning about young and old activists around the world. Ask - how would you feel if you lived there?</p>	 <p><i>"Higher temperatures from global warming change the weather and make it more intense. When it's very bad in some places, there can be floods, wildfire and damage to food crops. The animals and their home (ecosystem) suffers too.</i></p> <p><i>When there's damage to our crops or buildings this costs more money for everybody. So, weather and living conditions are going to get harder. This looks different</i></p>



Project learning to affect change in school & community (e.g. 'stop engine idling' campaign with parents).

Learning self-regulation tools including meditation and breathing techniques.

around the world, some countries are very badly affected, particularly in the global south.

We will prepare for this while also making changes to slow down warming. This includes stopping activities that make the greenhouse gases that heat the world up and making more sustainable choices. Change is hard at first, but it will lead to a healthier way of living. We can do it together.."

Key stage 2

As above, and:

Stories and case studies of social change and climate solutions (e.g. smoking ban, end of apartheid, U.S. civil rights movement, recent rise in solar panels and drop in cost).

Group work writing / imagining 'Thrutopian' stories which acknowledge challenges to come and lay out a realistic way through.

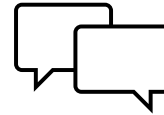
Learning about young activists around the world and the societal, cultural and legal challenges they face. e.g. prison sentences, online hate.

Project learning to affect change in school & community (e.g. changing canteen offering/ contact council about 'no mow may'.)

Offer membership of an eco-council.

Group work role play - imagine a scenario (e.g. flight grounded due to climate protest /ULEZ expansion) & what everyone is thinking.

Learning about sitting with feelings e.g. 'R.A.I.N. meditation (recognise, allow, inquire, nurture, Tara Brach)



It's true that if we don't change our greenhouse gas emissions, the earth's weather will get more intense, making life much harder for everyone.

Some people will be affected more than others, which isn't fair, particularly if their country been responsible for much greenhouse gas emissions in the past. Many people across the world may lose their homes, way of living or even their lives.

We will prepare for the impacts here and handle whatever comes our way, together. It's also right to keep on cutting greenhouse gas emissions as much as we can.

The less greenhouse gas we release, the less warming there will be, so it's always worth cutting the gas emissions and making sustainable choices. The sooner we do this, the more effective it will be.

Although not everyone can afford to make changes all at once, there are lots of are lots of people working on making sustainable changes. The more people that do this, the easier and cheaper it becomes for everyone to make healthy and sustainable changes. "



Key stage 3

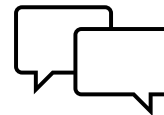
As above, and:

Stories and case studies of social change and climate solutions (e.g. A.I. food supply chain efficiency, digital democracy in Taiwan).

Engagement in protest and petitions (e.g. big soda out of sport).

Student led project learning to affect change in wider community and online.

Carbon literacy - to consider supply chains, transport, packaging and manufacturing (e.g. 'How bad are bananas?' game).



"Global warming speeds up once it gets going. For example, when glaciers melt, they reflect less sunlight back, so the sun's heat stays around to warm the earth further. so that's why so many people are working hard and campaigning to make sustainable changes... it is urgent.

As things get harder around the world, it affects us all, as our food supply chains and businesses are all connected. Some people will have to move country, so there might be more work to do to keep people safe.

The most affected countries and areas are often the least responsible for historical emissions, which isn't fair. Many





Learning about UN sustainable development goals and internal development goals.

Fake news and social media - fact checking and misinformation spotting. highlighting the difference between fact and opinion. Greenwashing spotting.

Learning about 'thinking traps' for climate anxiety.

Learning about the indigenous critique and climate justice. How might these populations feel?

people across the world may lose their homes, way of living or even their lives. Often it is the poorer or minority communities that are more vulnerable and hardest hit. e.g. if you can't afford air con.

Making the changes necessary to protect ourselves from impacts like heatwaves and to make sustainable changes will cost money at first and it will be hard for a lot of people. We don't know exactly how things are going to play out but we are going to work together to make the changes necessary.

This is actually a healthier way of living, and many people are now realising that they don't need unnecessary stuff"

Key stage 4 and above

As above, and:

Student led protest and petitions.

Carbon literacy - The Financial Times climate game - simulation of global systems interacting. Learning about planetary boundaries and feedback mechanisms.

Fake news and social media - fact checking and misinformation spotting (e.g. comparing different 'news' outlets reporting on the same event for reliability and accuracy).

Debate and critical reasoning - aim is to give children a voice and get them to think for themselves. e.g. debate:

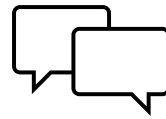
- What would you give up to save a stranger's life?
- Who should pay for flood damage?
- Does money make you happy?

Learning about psychological defence mechanisms for climate engagement. Role playing different points of view.

Learning about wellbeing and local economies, donut economics, responsive democracy.

Learning about the links between climate justice and colonial histories/ racial oppressions.

Learning about the drawbacks and barriers to some 'green technologies' e.g. EV minerals mining, A.I. energy use.



"This is a big shift in how we have been living. Greenhouse gases and a lack of regard for the environment have meant that weather conditions will make it too hard to live in many places.

The earth's feedback mechanisms (e.g. warmer oceans hold less oxygen, burnt forests do not sequester carbon) mean that there are 'tipping points' or 'planetary boundaries' that we must stay within. It is really hard for scientists to measure and know how close we are to these. What we do know is that the more greenhouse gas emissions we reduce now, the more effective those changes will be. We need everyone to be working together.

Different populations and areas are impacted differently, which isn't fair, especially as the people most impacted are often those who emit the least greenhouse gases. Often it is the poorer or minority communities that are more vulnerable and hardest hit. In some countries, this is related to the history of colonialism, where practices of taking resources from the land and disrupting indigenous peoples have damaged the ecosystem.

As all our systems are connected, this will impact everyone, through supply chain disruption, migration and other economic pressures. We've all got some tough decisions ahead as we balance the need to adapt and prepare for climate impacts, while doing everything we can to limit global warming.

Not everyone can afford to make changes straight away, but there are lots of people taking steps in the right direction, which brings the cost down for others. We need to support and accelerate this transition, so that we stay within the safe planetary boundaries. A lot of people think that living more simply and sustainably is actually a healthier and happier way of living. We are realising that unnecessary consumption doesn't make us happy."



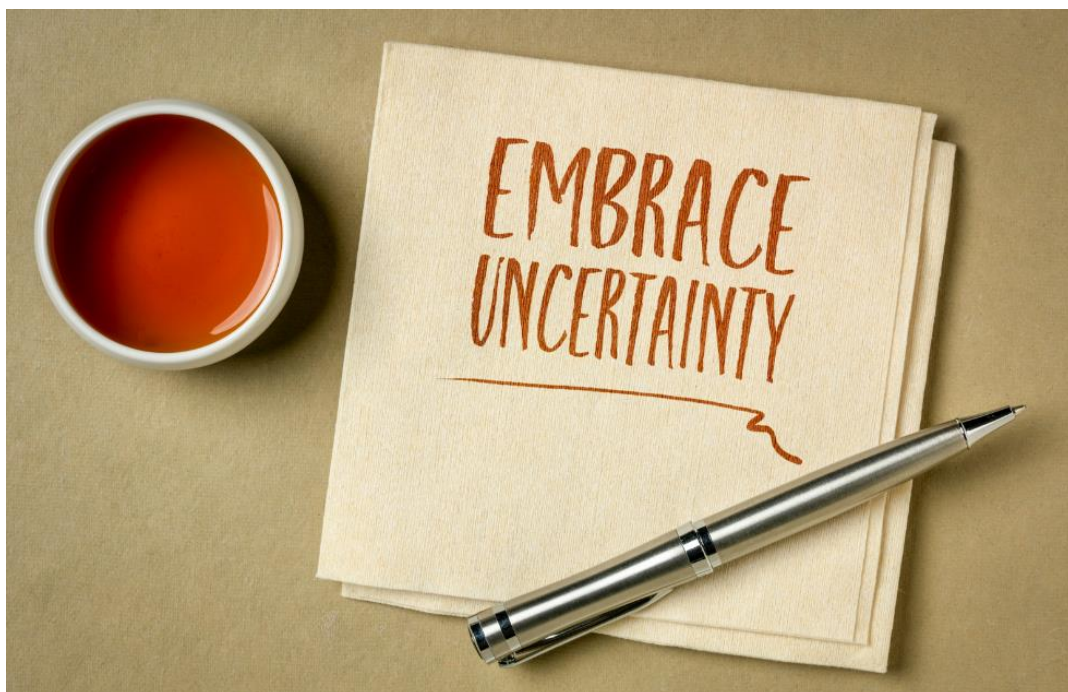


But how do adults stay relevant and helpful to children and young people when the pace of change is so fast? The interaction of climate change, advances in biotechnology and artificial intelligence (A.I.) make it impossible to know what the future will look like. Covid-19 has already shown us just how much things can change with unpredictable events.



Children and young people take cues from adults and model what they see and hear around them. To help students become competent adults in an uncertain future, we need to acknowledge that uncertainty, fast paced change, and the effects of unpredictable, destabilising events are the 'new normal'. We need to teach the skills of navigating misinformation online, and in discerning fact from opinion.

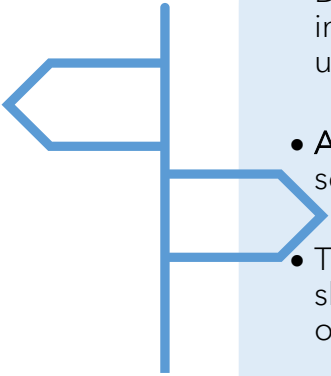
We need to stay humble, stay abreast of developments and trust in our capacity to adapt to change, and work together so that young people will too.





Recommendations: Relevant skills

How to talk climate truth and solutions:

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- Do not give false hope or avoid the topic of climate change, but deliver facts in **age-appropriate, bitesized chunks**. Questions might 'come up' at unplanned times - try to go with this as much as you can.
 - **Ask** young people what they know and be honest when you don't know something - engage in a **fact finding mission together**.
 - The **psychology, social change, economic and political aspects of climate** should be taught alongside the science. Encourage young people to 'think outside the box (of existing systems)'.
 - Teach the skills of **weighing up evidence** and the pitfalls of trusting information online. How to discern **fact from opinion** and how to spot **fake news**.
 - Encourage listening to other opinions and **critical thinking through debate**.
 - Focus on our agency and empowerment For every difficult fact, try and present **2/3 climate solutions**.

Future skills and uncertainty:

- **Normalise the uncertainty of life**. If this is hard for you, try a day out or even a lesson without making plans. Notice the feelings it provokes. Can you still have a nice day and handle what arises?
- Aim to model being **comfortable with change**. Ask young people to share a time that something changed for them, how they felt and how they coped. Read 'Who moved my cheese?' (Johnson, 2015)
- Stay humble, recognising that adults may not 'know best'. Respect and **encourage children's attempts to explore and empower themselves**.
- Teaching **anti-agist thinking** may help with intergenerational collaboration. Refer to activists such as David Attenborough, Jane Fonda and Mary Robinson.
- Value and celebrate the more **human skills of creativity and care for each other**, particularly in the age of A.I.





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