

CHILDREN &
CLIMATE
CHANGE



A Parent-Teacher Primer

Copyright © 2023 by John M Shepard

All rights reserved.

No portion of this book may be reproduced in any form without written permission from the publisher or author, except as permitted by U.S. copyright law.

Contents

About the Authors	1
Preface	2
Why we wrote this primer	
Introduction	5
Climate Anxiety in Children	
1. Talking Openly with Children About Climate Change	7
Decrease their fear and confusion	
2. Reducing Media Exposure	9
Limit to reduce stress	
3. Explaining Concepts Clearly	11
Help children understand climate change	
4. Letting Them Know What You Are Doing To Help	13
Work together as a family	

5. Helping Children Make Proper Food Choices	22
Children will love it!	
6. Connecting With Nature	25
Get out and explore the outdoors with them	
7. Make It Fun With Online Resources	28
8. Overall, Focus On Solutions	30
Changing our behaviors changes the world	
9. Additional Resources	32

About the Authors

Trudy and John Shepard are educators and integrative wellness coaches who believe in a holistic approach to caring for the planet. With their Australian Shepherd Arlo, they make their home in the beautiful foothills of the Olympic National Forest – Quilcene, WA. Among their many joys are exploring nature, gardening, and their many outdoor home projects. Their greatest delight is building relationships and creating a meaningful community with others.



Preface

Why we wrote this primer

We wrote this primer as a beginning tool for you, the parent, a teacher or child caregiver. You are the first line of defense in fighting climate change by helping children deal with their anxiety. Often, we expect others to take the lead- governments, corporations, or political leaders. They have their place, but no one is as influential in a child's life as you. A child needs role models to help them understand what real change means. They need the safety and security of knowing someone supports them when they face challenges of uncertainty. Children also need to know they can make a difference. You are their guide.

Our hope is twofold:

First, to offer practical ways a family or a classroom can be a part of the solution.

Second, to be a spark or catalyst to create new ideas that inspire and offer solutions for children. They are the next generation who, with creativity, can honor and respect the beauty and greatness of this magnificent earth we call home.

Again, this is only a primer- a tool to start your journey with children. It will offer the confidence they need to address the foremost daunting challenge of the world.

Please reach out to us with your own ideas, concerns, discoveries, and successes. We want to learn with you!

Contact us: john@callofeden.com

Introduction

Climate Anxiety in Children

The world is facing drastic environmental changes, like wildfires, floods, hurricanes, and habitat loss. Climate scientists anticipate that global warming could bring about frequent and intense extreme weather, the loss of many species, and food and water availability risks. This has resulted in considerable anxiety about the environment, even among children. It is commonly referred to as eco-anxiety or climate anxiety.

It is not a mental illness but rather an anxiety rooted in uncertainty about the future and alerting us to the dangers of a changing climate. It's normal to experience worry and fear about the consequence. Anxiety about the climate can be accompanied by grief, anger, guilt, and shame, affecting mood, behavior, and thinking. These modifications can cause

significant emotional distress among those affected, and psychologists have become increasingly aware of their toll on people's mental health.

In the face of climate change, more and more children are experiencing this same anxiety and fear in their daily lives although in different ways. Children may find the effects of climate change distressing. In addition to the psychological effects, children may experience physical symptoms such as headaches, stomach aches, chest pains, fatigue, and dizziness. As temperatures increase, biological diversity shrinks and sea levels rise (to name a few) due to global warming, it's easy for anyone to feel overwhelmed and hopeless. As parents and guardians, it's vital to help children process these feelings and provide them with strategies for managing their climate anxiety.

In this primer, you will find practical solutions to help ease a child's fears about climate change and will help with some of the climate anxiety you face together as a parent and family.

Chapter 1

Talking Openly with Children About Climate Change

Decrease their fear and confusion

It might seem uncomfortable to talk openly with your child about the very issue that causes you so much worry. However, talking candidly about climate change can decrease fear and confusion by giving children solid facts without overwhelming them emotionally.

Mary DeMocker, the author of *The Parents' Guide To Climate Revolution*, recommends focusing on simple actions families can take personally and collectively. Asked what feelings that parents tell her they are grappling with, she lists: guilt, distraction, confusion, and (the big one) fear.

She states, "Who wants to talk about this idea of imminent doom or huge storms or wildfires sweeping through your town? ... It's frightening. Honestly,

I can't look at it every day, and I have to take it in microdoses... We also fear alarming our children or saying the wrong things if they have big feelings."

The best way for children to deal with any emotional tension or difficulty is by expressing themselves freely and feeling supported by those around them. When a child feels heard and validated, they're more likely to move through difficult emotions toward resolution. Encourage your child to share their thoughts and feelings with you or another trusted adult, so they don't feel as though they have to keep complex issues bottled up.

Anxious children may strive for perfection, such as avoiding travel in cars or plastic altogether. It's impossible to meet unrealistic standards, so it's better to find a balance and teach children that it is ok if things are not perfect. It's possible to be passionate about the environment without letting anxiety take over. For instance, one could say: "I understand how serious climate change is, and it bothers me too." When I'm feeling calmer, it's easier for me to take action against my anxieties."

Chapter 2

Reducing Media Exposure

Limit to reduce stress

It can be hard not to be exposed entirely to media coverage of climate change. A Pew Research Center survey in 2020 revealed that slightly over half of U.S. adults use social media to access news *often* or *sometimes*. People have to contend with a growing volume of data, making it hard to organize and interpret. To make it worse, clickbait headlines often include negative or dramatic stories which can further increase stress. Finding ways to cope with anxiety caused by too much media exposure is essential for our mental well-being.

Terms that have emerged recently include “doom-scrolling,” “headline anxiety,” and “headline stress disorder.” The psychological strain of living through and absorbing dismal news offers up a steady drumbeat of headlines and social commen-

tary on things that matter: the ongoing pandemic, racial injustice, shootings, and climate change.

Limiting exposure to children is essential in reducing their stress levels. Children should be discouraged from seeing disturbing imagery or hearing stories about people suffering due to human-induced environmental damage, as this will only add fuel for further worry about their own future on an increasingly fragile planet.

Chapter 3

Explaining Concepts Clearly

Help children understand climate change

Rather than avoid discussing climate change altogether, explain concepts surrounding climate crises in terms that are easy for your child to understand without sensationalizing events or stoking an irrational sense of panic about what's happening in the world today. Provide accurate information so that your child knows what steps society needs to take for positive action toward environmental protection from occurring.

Here are some helpful ways you can talk with children:

- "Humans are burning lots and lots of fossil fuels for energy, in planes, in cars, to light our houses, and that's putting greenhouse gases into the air. Those gases wrap around the planet like a blanket, making everything

hotter."

- "A hotter planet means bigger storms. It melts ice at the poles, so oceans will rise, making it harder for animals to find places to live."
- "It's a big problem, and there are a lot of intelligent people working hard on it. Plus, there are many things we can do as a family to help."

Find the article here: [How to talk to kids about climate change with these 6 tips: Life Kit: NPR.](#)

Take time each day to have conversations with your child. Ask what they know about climate change and, as a family, continue to learn more about how climate is changing.

Chapter 4

Letting Them Know What You Are Doing To Help

Work together as a family

Anxiety can lead us into "paralysis," as our actions may not feel like enough given our current reality. Help empower your children by giving them simple, actionable steps to make a difference (for a sample, see below). Allowing them direct control over small matters can make a big difference. Ultimately this allows them peace of mind, even if there is little being done by others on a global scale. Even in small ways, parents can set an example for children while preventing the severe effects of climate change and making for a safer and cleaner planet.

Explain what positive steps you are taking as a parent or family to prevent climate-change causes from escalating even further. Explaining the small things we do as individuals can help children understand that

their efforts impact the environment – no matter how small the action may be!

As a family, here are several ways you can help:

- Planting trees is an important part of preserving the environment and sustaining life on the planet. Trees are essential for removing carbon dioxide from the air and producing oxygen, which is necessary for all living creatures. The Arbor Day Foundation encourages people to plant trees in their local communities or in backyards. This helps bring purified air to the environment. Planting trees in open spaces can positively impact both the short-term and long-term.

Those who do not have enough room to plant trees directly into the ground can still make a difference by planting select trees into planters. This will also help to reduce carbon dioxide levels and produce more oxygen in the atmosphere. Additionally, planting trees can provide shade, reduce noise pollution, improve water quality, and create habitats for wildlife. Planting trees is essential to protecting our

environment and ensuring its sustainability for future generations.

- Shut off the lights.

Turning off lights when not in the room reduces energy consumption and helps protect the environment. Not only does it help reduce carbon emissions and greenhouse gasses, but it also reduces the carbon footprint in general. Children can positively impact climate change and help conserve energy resources by doing so. This simple act of turning off lights when not in use can have a meaningful impact on reducing electricity bills as well as helping to reduce air pollution. Conserving energy resources at home will help children become more aware of their environmental impact and how their actions can make a difference.

- Make sure to shut doors immediately to keep the heat inside.

Leaving a door open to an air-conditioned building in the summer can have a substantial environmental impact. Not only does it waste energy, but it can release 2.2 tons of carbon dioxide into the atmosphere throughout one summer. That's about as much as a car would emit on a 5,000-mile road trip! We need to

be mindful of our actions and take steps to reduce our carbon footprint.

If you see a business with its door open in the summer, don't hesitate to ask an adult to help you email the business or talk to an employee about closing it. This small action can make a big difference in reducing emissions and help protect our planet. We all have the power to make positive changes that will benefit future generations and ensure that our environment remains healthy and sustainable for years to come.

- Shower quickly by taking 2-minute showers.

Taking shorter showers is an easy way to help conserve water and reduce the strain on local resources. When people take showers, it uses approximately 2.5 gallons of water per minute, and each gallon uses three ounces of carbon dioxide. This means that if children shorten their showers by as little as two minutes per shower, 342 pounds of carbon dioxide can be saved yearly. This is an excellent way for children to get involved in helping the environment and reducing their carbon footprint.

Shorter showers also have other benefits, such as saving money on utility bills and conserving energy. Additionally, taking shorter showers helps reduce water waste which can lead to cleaner rivers and streams in our communities. Taking shorter showers is a simple step everyone can take to help protect our planet from further damage caused by climate change. Children need to understand the importance of conserving water so they can become responsible adults aware of how their actions affect the environment.

- Whenever possible, walk or ride a bicycle instead of asking your parents for a ride.

Walking or riding a bike when able is a great way to reduce the amount of pollution in the environment. Cars are one of the biggest pollutants, emitting greenhouse gasses at alarming rates that can harm the air we breathe. Fossil fuels are reduced, and pollution rates decrease when bikes or walking are done versus driving. This means that when kids and parents choose to walk or ride a bike for short trips, they are not only helping the environment but also their overall health.

The benefits of walking or biking instead of driving go beyond just reducing pollution. Walking and biking can help improve physical fitness, increase energy, and even reduce stress. Additionally, it can be a fun way for families to spend time together while getting some exercise. With all these benefits in mind, it's clear why choosing to walk or ride a bike when able is essential for our environment and health.

- Turn it off when not in use.

Unplugging gadgets and appliances not in use is an essential step in helping to prevent climate change. Children today have access to various electronic devices, from smartphones and tablets to gaming consoles and computers. While these devices can provide hours of entertainment, they also draw electricity even when not in use. According to the US Department of Energy, this wasted energy adds up to \$19 billion annually.

By unplugging gadgets or appliances that are not being used, parents can save money on their monthly energy bills while also doing their part for the environment. Not only will this help reduce the amount of non-renewable resources being used, but it will also

help reduce emissions contributing to global warming. Unplugging devices when not in use is a simple yet effective way for families to positively impact our planet.

Here are some of the other ways you, and your child, can fight climate change:

- Have your child research alternative energy sources such as solar, wind, wave, geothermal, and other renewable sources. Please encourage them to think about which works best in different climates or environments.
- Find stories demonstrating real-life impacts of climate change worldwide to help spark meaningful conversations with them about how individuals are connected to global effects.
- View documentaries or videos related to climate change issues – this can provide an exciting way for children to learn about the subject matter in an informative manner.
- Together, go to their school and discuss with their teacher ways their school could reduce

its carbon emissions or support sustainability initiatives in the local community.

- Collect discarded trash from a beach clean-up event. Then spend time sorting it into categories according to type (plastic, metal, glass) and take to a recycle bin or center. This will help illustrate how much rubbish is created by our everyday activities that pollute our environment.
- Find materials that explain how marine life is affected by Oceans Acidification or plastic pollution.
- Volunteer at an animal shelter or wildlife sanctuary – this will help teach empathy for living creatures affected by climate change and respect for nature.
- Join (or organize) a community action group that organizes events specifically for tackling climate-related issues locally.
- Talk with the school or school parent group about planting vegetation around campus – teachers can incorporate this with lessons

on habitat quality while also helping the environment! Plus, it makes your school look great!

- Educate your child on the benefits of green technologies such as LED lights or energy-saving appliances to encourage more eco-friendly decisions.
- With graphs show changes in the ice cover of the North and South Poles from previous years. These provide a great visual of global warming trends.
- Visit websites such as The Nature Conservancy's Global Forest Watch, where your child can see satellite images tracking deforestation worldwide.
- Get involved in composting initiatives in your area - many cities have drop-off points for organic waste.

Chapter 5

Helping Children Make Proper Food Choices

Children will love it!

Adopting a plant-based diet for your family can be a positive choice and exciting for children to learn about. It does not necessarily mean that all meat or dairy products must be eliminated from the diet. Show children how eating plant-based sources such as fruits, vegetables, nuts, legumes, beans, and grains can lower harmful emissions of CO₂, can help us feed more people, and create a cleaner environment.

For example, help your child research how our selections for meals each day have an immediate effect on our planet's health. Roughly a quarter of the food created for consumption is not eaten. From production to consumption, food is lost or wasted throughout its journey. The food items we take in, such as lettuce, soy milk, shredded cheese, and beef, necessitate re-

sources for their production. However, some foods are more resource-demanding than others. A vast collection of studies point to meat production as having the most influence on climate change and the environment regarding farming. Livestock production alone is responsible for up to a reported 14.5% of all man-made global greenhouse gas emissions—more than any other transportation sector combined.

If you're interested in a plant-based diet but don't know where to start, start with meatless Mondays. This is an easy way to find meals and plant-based options that you enjoy, plus it's good for the planet. Not everyone needs to go vegan or vegetarian, but reducing meat consumption one day a week can benefit the environment and your health.

Here are some other ways children can help you make the right food choices:

- Experiment with new foods and ingredients
- Be creative with leftovers (no waste).
- Let children find recipes and start a recipe book.
-

Create a weekly meal plan.

- Pick one food item, either daily or weekly, and learn about it together.

Involve your children in the kitchen. You'll be surprised how much enjoy and take it seriously.

Here are some of the ways they can join in:

- Cleaning and preparing fruits and vegetables.
- If they can read, have them read and follow the recipe.
- Slicing tender vegetables.
- Combining ingredients by stirring and mixing.
- Holding the measuring cups.
- Mixing ingredients into the bowl or pan.
- Operating the food processor or blender by pushing the buttons.
- Everyone loves participating in taste tests!

Chapter 6

Connecting With Nature

Get out and explore the outdoors with them

Adults can play an essential role in helping children explore and learn. Allow children to observe and interact with their surroundings by providing natural environments to explore, such as parks, gardens, and forests. Additionally, you can add tools to enhance explorations, such as shovels, magnifying glasses, pencils and paper, cameras, and other related resources. This encourages children to further investigate the environment around them.

Provide nature activities like gardening, taking walks in parks or city neighborhoods, visiting farmer's markets, or exploring rivers and creeks together whenever possible. Helping children explore their outside world through real-life experiences will show them—and teach them – how local habitats interconnect and support a healthy environment all around

us. By doing this, it brings back hope, reduces their worries about the environment's decline, and motivates others to look after it, which will have a positive long-term effect on our planet.

Let them get dirty by jumping in puddles, building forts, and rolling over rocks and logs to look for bugs and worms. Help them pick up sticks, leaves, and pinecones. These activities stimulate their senses with the textures, sights, and sounds of the natural world around them.

Remember, outdoor play in nature doesn't have to be complicated. You don't need expensive equipment or elaborate activities; being outside can be enough! Simple activities like playing tag or hide-and-seek are great ways to engage your kids with nature. You can also encourage them to explore their environment by looking for different types of plants and animals or collecting interesting items like rocks or feathers. Allowing your children to explore on their own terms will help them develop an appreciation for the outdoors that will last a lifetime.

Bringing nature inside is another great way to get the outdoors into homes and classrooms. Early educa-

tors have been using components of nature in their indoor environments for years. Classroom ideas include tree stumps for sitting or building boxes and containers where water, sand, and dirt can be used for exploration and measurement. Tree branches can be suspended from the ceiling to display children's nature discoveries if they choose to do so. Loose materials like pinecones, stones, seashells, leaves, and twigs displayed in baskets can also provide an idea for children's imaginations. These natural elements indoors can create a more calming atmosphere that encourages creativity and exploration. It can also help foster a connection with nature by allowing children to observe and interact with it in a familiar environment.

Chapter 7

Make It Fun With Online Resources

NASA (National Aeronautic & Space Agency) has online games to educate children about climate change issues such as rising sea levels, food security, or energy efficiency concerns. These are all wrapped up in fun language, and children will enjoy playing with friends and adults alike. The games create awareness while allowing kids to bond with adults without triggering fear from conversations focused too heavily on global warming effects alone.

There are several other online resources. Two that stand out are ClimateKids.org and ClimateKidsNASA.gov. Both resources are good tools to assist kids in studying climate change and its environmental impact. With these tools, children can understand the scientific principles behind climate change. Resources like these can show how it impacts their lives

by engaging in interactive activities, watching videos, and playing games. These resources also contain educational materials for classrooms or at-home studies, such as lesson plans, worksheets, and tasks.

Also, information is provided on minimizing carbon emissions and doing something constructive to conserve the environment. Using these resources, children can comprehend why it is essential to look after our planet and how they can help make a difference in their lives. If you do your research online you will find other resources to use with your child.

Chapter 8

Overall, Focus On Solutions

Changing our behaviors changes the world

When communicating about the changes in the world due to our climate crisis, look for solutions rather than problems you can work together towards (like expanding recycling habits). This helps foster optimism rather than negative emotions among concerned nearby generations just beginning their environmental educations. Children need heroes who provide sustainable solutions – make sure they know what people are already doing today, which inspires them to understand a brighter 'green' eco-future ahead when actions continue being taken now!

By changing your and your child's behavior, we help the environment and lower our impact. Individually, no one can fix the climate, and however, together, we can become part of an era that does. Due to the social nature of humankind, people taking action against

climate change has a multiplier effect. Each individual participating in this collective effort can create an even bigger positive outcome.

Individuals taking the initiative to acknowledge and address climate change and other environmental concerns make the issue more tangible and vital. Moreover, when one person takes action, others may follow suit - creating a ripple effect of positive change. Numerous minor changes over time can lead to significant and enduring societal transformations. It's like a snowball that continues to get bigger as it rolls downhill, gradually picking up smaller snow-like particles that eventually give it momentum to have its own life.

We all have a crucial responsibility and vital role to play in reducing the effects of climate change!

Thank you for doing your part. We're all in this together.

Chapter 9

Additional Resources

Guide to Climate Change for Kids

Climate Kids.org

How to Talk to Kids About Climate Change | Naturepedic

18 Simple Things You Can Do About Climate Change | UC Davis

How to Stop Global Warming, Solutions to Prevent Climate Change | NRDC.org

Nurtured by nature (apa.org)

10 Solutions for Climate Change - Scientific American

A special thanks to those who supplied the images:

Front cover photo by jonas mohamadi