



An Antidote to Ecophobia

Opportunities for Awe through Books for Young Readers

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Abstract

Children’s ecophobia—a sense of overwhelm and fear regarding environmental issues and climate change—is on the rise. To counter this trend, fostering a sense of awe grounded in Indigenous perspectives on the environment is essential not only for children’s emotional health, but for the longevity of humans and the earth. This article provides practical strategies for early childhood and elementary teachers to help children experience awe about nature as they read picturebooks. We examine two texts grounded in Indigenous perspectives and we describe hands-on strategies teachers can use to enable students to gain tangible experiences in *reciprocal relationship* with nature.

Keywords

environmental education, picturebooks, awe, nature education

Introduction

As children increasingly encounter information about climate change, they paradoxically spend less time connected to the natural world. Ecophobia among young people is on the rise: a growing awareness of the climate emergency can lead to “fearful, cynical, and pessimistic” feelings toward the earth (Strife, 2011, p. 37). An antidote to ecophobia, crucial for the planet’s health and longevity (Pearsall, 2007), is awe. This “feeling of being in the presence of something vast that transcends your current understanding of the world”—is one emerging tenet of environmental education (Keltner, 2023, p. 7).

Ng et al. (2023) found that learning about nature can promote awe and a sense of connection. Too often, however, students read about ecosystems, weather patterns, or animal adaptations without having ever felt the chill of early morning air in a forest or having ever heard the call of a bird echo through the trees. Keltner (2023) argues that our experiences of awe don’t have to be limited to infrequent breathtaking events such as seeing an astonishing mountaintop vista. They can be experienced in our everyday lives. We argue that educators can foster awe about the environment in their daily practices, even when opportunities for immersive field trips are limited. Importantly, all experiences with nature, even seemingly negative ones, can foster awe as long as people can reflect on them (Hicks & Stewart, 2020). Therefore, educators should focus on creating reflective opportunities rather than curating only positive experiences with nature.

Indigenous perspectives on the natural world foreground awe as foundational to humanity’s ecological belonging (Celidwen, 2024). Specifically, as Celidwen & Keltner (2023) note, “within Indigenous conceptualizations of kin relationality, experiences of [...] awe are extended to all living forms within interdependent relations” (p. 7); Indigenous perspectives on awe come from an understanding of oneself as being in a relationship with larger collectives of other living beings.

We offer recommendations for elementary educators to use picturebooks in tandem with outdoor learning experiences to foster students’ awe and counter ecophobia. We analyze two recently published picturebooks that rely on Indigenous environmental perspectives and offer entry points for educators to orient children to the environment with a sense of awe: [Zonia’s Rain Forest](#) by Juana Martinez-Neal (2021) and *Little Land* by Diana Sudyka (2023). *Zonia’s Rain Forest* is set in the Peruvian Amazon, and the main character is Asháninka. While not written by an Indigenous creator, Sudyka details how *Little Land* was informed by Robin Wall Kimmerer’s Indigenous ecological perspectives.

Strategies for Promoting Awe

Embody Awe

When learning about unfamiliar environments, children need to gain concrete understandings of nature through play. Inspiring students to change their daily choices to preserve a distant environment can be challenging; through play, children make abstract places real to them. In response to the evocative words and images in *Zonia's Rain Forest*, teachers can create immersive Amazonian rainforest classroom environments. When students play by acting as animals or plants, they get a chance to experience awe-filled connections with a distant environment before we ask them to save it (Sobel, 1996).

Find Awe in the Dirt

Oftentimes, educators inadvertently suggest that nature should be left alone by humans to preserve it. Additionally, children might get the message that parts of nature can be harmful (poisonous bugs, poisonous plants, etc.) and so should be avoided. Young children learn through tactile experiences, so providing opportunities for them to touch and play with tangible natural elements in safe and respectful ways, such as getting their hands dirty while planting seeds, can help them understand humanity's reciprocal relationship with nature. Rather than viewing humans as earth's saviors, these activities promote the perspective that our participation with nature is fundamental to the earth's longevity, a relationship of reciprocity (Kimmerer, 2013). With all children, and especially with children who have limited access to nature, this hands-on approach can combat one of the primary characteristics of ecophobia. It helps students appreciate that nature gives them much, and they are also part of nature.

Many environmental picturebooks present opportunities for students to consider how they might be in a reciprocal and restorative relationship through tactile experiences. In *Little Land*, after the environmental destruction which literally turns the fictional world upside down, a few child characters dig in the dirt, restoring the land by planting a tree. The next page zooms out to show how this sparks a community-wide effort where people's tangible interactions with their environment contribute to nature's regeneration. Even more impactful are books where people are immersed in a playful relationship with nature. Images in *Zonia's Rain Forest*, such as when many butterflies land on her, demonstrate how children can physically interact with nature respectfully rather than simply avoiding it out of fear, either of harming it or of being

harmed. Texts such as *Zonia's Rain Forest* can promote a reciprocal, hands-on relationship between children and their environment.

Find Awe in Relationship

While one-off environmental field trips can provide students meaningful place-based learning opportunities, more sustained experiences can help students develop deeper and longer-term relationships with nature. In *Little Land*, readers see the same piece of land over a long period of time, demonstrating what it looks like to get to know a particular place over time. Teaching children to find sit spots allows them to return to the exact same place to witness the same environmental setting across many different times and seasons (Hu, 2022). When people spend extended time in a particular place or element, they develop the deep, reciprocal relationship Kimmerer (2013) promotes. Similarly, Sudkya dedicates the book to “the blue gentians of the Linne Prairie,” specific flowers that she loves. Included next to this note is the image of the blue flower that grows in alpine areas worldwide and is found commonly in the author’s location. In her dedication, Sudyka elevates this specific relationship to such a degree that the flowers take a spot in the book typically reserved for humans. Bringing students’ attention to this note can lead us to ask children: “What natural element do you know and love? How can you show that love?” Children might rely on *Little Land* as a mentor text to write a love letter/story to/about the element of nature they love. We might model and encourage students to consider ways that their actions in and out of the classroom are motivated by awe for specific aspects of the natural environment in their local area.

Even in areas without extensive access to nature, teachers can promote prolonged relationship between children and nature by having a classroom pet or watching a natural process unfold like tadpoles turning into frogs. Awe can help us love our immediate environment, but it can also break us out of the familiar. It can bridge the gap between our immediate environment and faraway places that are at risk in some way. Webcams are one way to connect students and distant elements of nature, returning to the same animals throughout the year to observe, listen, and learn from them (Fokides & Arvaniti, 2020). Teachers using webcams can attest to the excited, collective awe experienced when, for example, a clutch of eagle eggs that the class has been following finally hatch and the slick, curled eaglets emerge from their shells. Teachers can search for webcams relating to natural aspects depicted in the books they read, enabling their students to experience awe about faraway places through continuous observation. Strategies that promote ongoing connections with particular

animals, plants, or natural spaces can help students experience ever-deepening awe as the relationship develops.

Model Awe

Before, during, and after reading books with children, teachers can model a sense of awe at the environment they are exploring. Preparing to read with children, teachers can give themselves space and time to let real awe grow, dwelling on specific words and images that inspire awe and then highlight these before, during, and after sharing the book with students. In *Zonia's Rain Forest*, teachers can model both positive and negative emotions as they read. For instance, Zonia spends the first part of the book interacting with a dazzling array of plants and animals, which educators might respond to with exuberant exclamations of, "Oh, wow!" However, Zonia then reaches a part of the forest that has been clear-cut. After the abundance and joy featured earlier, this stark image of destruction is shocking. An educator reading this book with children might pause when they get to those pages, perhaps slumping a bit in their seat and letting out a quiet, "Oh, wow." Letting children see genuine physical indicators of awe, whether in response to positive or negative events, invites them into this crucial emotion as they read.

Teachers can consider how to demonstrate awe outside the classroom and rely on these behaviors as they read. Just as they might pause while outdoors to marvel with students at the brilliance of an owl's nest, during reading, educators can gasp in real wonder when they turn the page and something marvelous is revealed. Using a range of vocal dynamics helps convey a range of wonder, modeling everything from loud, wholehearted amazement to reverent, whispered astonishment. Teachers might include occasional pauses, showing that it is okay to sit in silent contemplation of the world in the book. In short, slowing down to prioritize reading that builds children's inner worlds helps deepen young people's connections to the physical worlds around them.

Strategies such as the ones offered here can foster students' relationships to the environment as they read about nearby and faraway places. Grounding our reading of environmental children's literature in Indigenous perspectives about nature can help us recognize that the planetary health is dependent on us being in a respectful and reciprocal relationship with the earth's web of life. Using hands-on activities alongside picturebooks can develop students' awe-filled sense of ecological belonging, positioning them not as saviors of the environment but as kin and inherently embedded in nature.

References

- Celidwen, Y. (2024). *Flourishing kin: Indigenous wisdom for collective well-being*. Sounds True.
- Celidwen, Y., & Keltner, D. (2023). Kin relationality and ecological belonging: a cultural psychology of Indigenous transcendence. *Frontiers in Psychology, 14*, 994508.
- Fokides, E., & Arvaniti, P. A. (2020). Evaluating the effectiveness of 360 videos when teaching primary school subjects related to environmental education. *Journal of Pedagogical Research, 4*(3), 203–222. <https://doi.org/10.33902/JPR.2020063461>
- Keltner, D. (2023). *Awe: The new science of everyday wonder and how it can transform your life*. Penguin Press.
- Hicks, J. R., and Stewart, W. P. (2020). Learning from wildlife-inspired awe. *The Journal of Environmental Education, 51*(1), 44–54. <https://doi.org/10.1080/00958964.2019.1594148>
- Hu, H. (2022). Rethinking nature journaling in the Kindergarten Program: Action research in learning and teaching. *Journal of Outdoor and Environmental Education, 25*(2), 159–179. <https://doi.org/10.1007/s42322-022-00095-0>
- Kimmerer, R. W. (2013). *Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants*. Milkweed Editions.
- Martinez-Neal, J. (2021). *Zonia's rain forest*. Candlewick Press.
- Ng, S. T., Leung, A. K. Y., & Chan, S. H. M. (2023). Through the lens of a naturalist: How learning about nature promotes nature connectedness via awe. *Journal of Environmental Psychology, 92*, 102069. <https://doi.org/10.1016/j.jenvp.2023.102069>
- Sobel, D. (1996). *Beyond ecophobia: Reclaiming the heart in nature education*. Orion Society.
- Strife, S., & Downey, L. (2011). Childhood development and access to nature: A new direction for environmental inequality research. *Organization & Environment, 22*(1), 99–122. <https://doi.org/10.1177/1086026609333340>
- Sudyka, D. (2023). *Little land*. Little, Brown Books for Young Readers.