



## Stories of Climate Change Education

Toronto District School Board - Climate Literacy & Leadership Program 2025

# From Roots to Responsibility: Climate Learning Through Gardening with K-2

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Kindergarten and Grade 1/2



### Learning Outcomes:

Students will...

- demonstrate understanding how plants, pollinators, and trees are connected to clean air, food systems, and a healthy planet on which all living things depend.
- demonstrate environmental reciprocity and responsibility by participating in climate solutions e.g., planting pollinator-friendly plants, making paper, diverting waste

### Climate Concepts and Actions:

- **Human impact:** Know that the climate is changing, and humans are the leading cause. The changing climate impacts ecosystems & communities in different ways. Some ways are healthy, and some ways are unhealthy.
- **Ability to make a difference:** Our choices impact ourselves, our communities and our world. No one can do everything, but everyone can do something.
- **Interdependence:** all living things are connected, every organism, system, and place depends on others

## Learning Activities:

In Kindergarten, we focused on trees and the concept of reciprocity—how trees help humans and how humans can help trees. Students explored environmental responsibility through hands-on experiences such as:

- Learning about different types and parts of trees
- Studying seeds: how they are made and why they are important
- Exploring photosynthesis and how plants clean the air
- Acting out the process of photosynthesis through drama
- Tapping a maple tree and making maple syrup
- Recycling and making our own paper
- Planting seeds to grow plants for the school garden



In Grade 1/2, we focused on pollination and the role of pollinators, especially bees. Students made connections between pollinators, climate change, and community action through activities such as:

- Learning how pollination works and the parts of a flower
- Studying pollinators (e.g., bees, butterflies) and threats like monoculture farming, pesticides, and habitat loss
- Comparing mono-farming and poly-farming
- Creating a visual climate change cause-and-effect chart
- Writing about climate problems and solutions
- Brainstorming local actions to fight climate change
- Researching native pollinator plants
- Planting seeds that will go into a school pollinator garden



## Lessons Learned:

- Climate education is most meaningful for young learners when it's grounded in real-world, hands-on experiences like gardening. "I found that learning in our schoolyard helped students see themselves as scientists and caretakers of the environment, which made them more engaged in conversations about climate change."
- Integrating storytelling, art, science, and action helped students build a sense of hope and responsibility, not fear.

## Key Resources:

- The Tantrum That Saved the World, By Megan Herbert and Michael E. Mann
- Rabbit and Otter Go Sugarbushing, By Liz Granholm
- [Native Plants of North America - Plant Database](#) (Lady Bird Johnson Wildflower Centre at the University of Texas at Austin)