

Growing Native Plants from Seed

A Primary Level Activity (ages 5-8) (Can also be directed to Juniors)

Science

Source: Beth Parks and Liz Hood

Basic Description: Students are given a hands-on experience of planting seeds and seeing the results. Long term care and monitoring the seedlings as they grow will ground the students in a real experience as they explore related concepts later on.

Materials:

- Egg cartons, or some other reused container (ensure drainage holes have been poked in any containers used), and trays to set underneath them
- Potting mix (a soilless mix will prevent any disappointments like 'damping-off', when seedlings die due to too much bacteria in common garden soil)
- Popsicle sticks or an equivalent to act as markers
- Native plant seeds- check your local native plant or wildflower society, botanical garden or Arboretum for information on where to find seed. A few different varieties gives students the chance to choose a favourite
- Water in a watering can or equivalent
- A window ledge on a sunny south or west-facing window, or a donated plant stand with fluorescent grow-lights
- Helpers of some kind to assist younger children with the task

Time Allotment: 30-40minutes. This activity is intended to be a hands-on experience to excite students while introducing the very real concepts of native plants, where they grow, how they grow, and why they are so special. The activity itself should be simple and pleasurable, while the lessons can come in the extensions you choose to explore with your class.

- Introduction- 5-10 minutes
- Planting- 10-15 minutes
- Clean-up- 5-10 minutes

Procedure:

Introduction:

- Announce that today the class will become gardeners, and begin to take care of some very special plants.
- Ask the class what plants need to grow- as kids offer suggestions, pull out your supplies (soil, water, sun/light)
- Depending on the grade level, explain in some detail that they are planting very special seeds- these are plants that have been growing in their neighbourhood for hundred of years, but may not be getting the special attention they deserve. Some may even be in trouble, and are disappearing. Explain that they will be the very special caretakers of these plants.
- Know what you are going to do with the plants after they are of a sufficient size- will they go home, or go into a garden bed at the school- announce the plans before you begin planting

Activity:

- Before beginning, show the class how to plant their seeds- take a container, fill $\frac{3}{4}$ with soil, press down firmly, sprinkle seed, sprinkle another small amount of soil, press down gently and water (watering may be best left to older kids or the teacher after the planting- a strong flow of water on the soil could unearth the seed, and cause problems with germination)
- Also encourage the class to write the name of the plant, their name, and the planting date (or birthday) on a tongue depressor, popsicle stick, or marker of some kind, and place it in the side of the container
- Once you have demonstrated what to do, split the class into groups who all want to plant the same kind of plant, complete with helper (if needed), containers, soil, seed, and water (if students are watering their own).
- Have helpers assist students to write their own plant label, and put the label in the pot right away (will save on 10 unclaimed pots later on!)

Follow-up/Discussion:

- Organize a class clean-up
- Announce that the class will have to tend the plants every day- perhaps create a rotating schedule of "Gardener's of the Day", who's job it is to check to see if the plants have germinated or are dry and need watering
- Introduce any follow-up activities now

Extensions:

- **Math-** Recording and graphing can be done to keep track of the plant's growth over time, the amount of water used over the whole life of the plant, days to germination between different plants and within the same type of plant.
- **Language Arts-** A vocabulary list can be made using plant related words, for example:

Sun	Water	Insect	Root
Soil	Plant	Butterfly	Bud
Flower	Leaf	Sprout	Light
Stem	Seed		

- For Junior aged students consider words like: habitat, ecosystem, nutrients, biodiversity, native, exotic, invasive, petal, sepal, stamen, pistil, etc.
- **Language Arts (JK- Gr. 1)-** Find a favourite story about growing plants in the garden, or plants that grow in the wild, ideally with a young child as the gardener/explorer. Read at story time.
- **Art-** Have students paint their favourite flower, favourite scene from



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