

HERB-E



Generic Space



Physical Space



Digital Space



Blended Space

- Interactive Lifecycle Garden



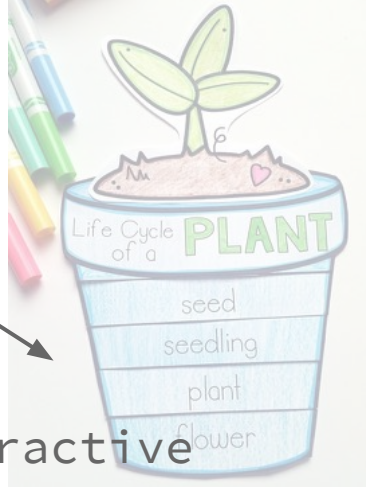
RATIONALE

- Every school provided with permanent garden with Herb-E providing mobile extras and interactive features throughout the year.



RATIONALE

- Educate children
- Provide fun and interactive learning experiences
- Cater for different age groups
 - Introduce coding to older age groups
 - Demonstrate benefits of composting to younger kids
- Teamworking
 - Daily rota for caring for plants in each class
- Weekly quiz & leaderboard
- based on tasks during week



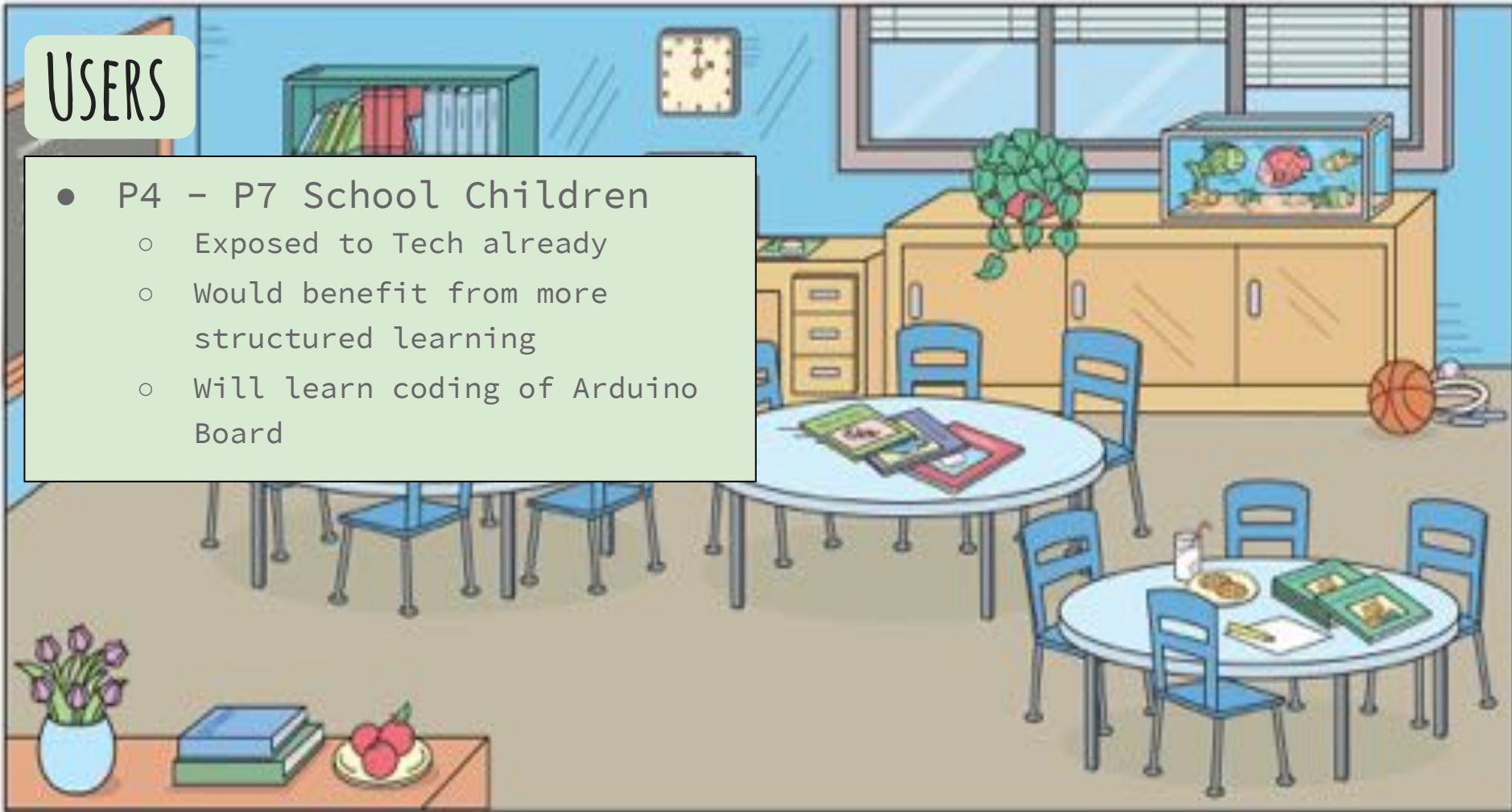
USERS

- P1 – P3 School Children
 - Familiar with tablets
 - Enjoy messy play
 - Learning through play



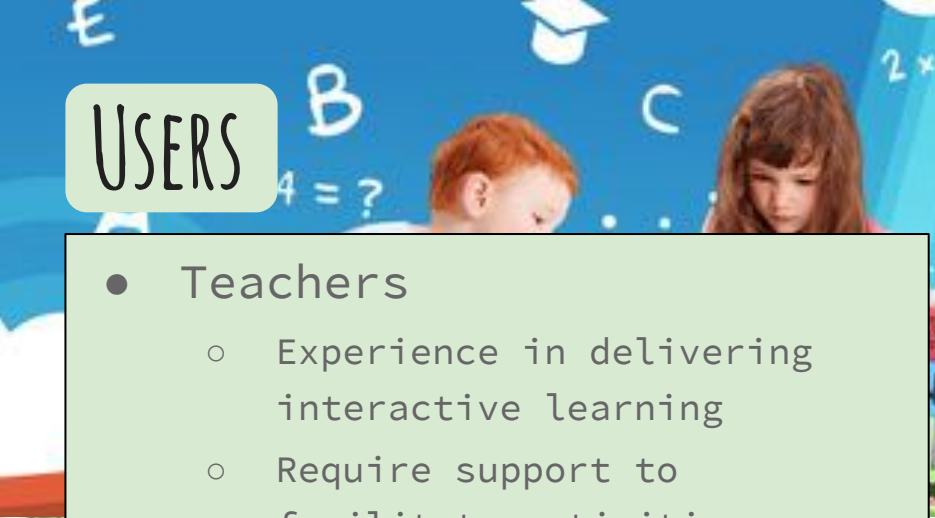
USERS

- P4 – P7 School Children
 - Exposed to Tech already
 - Would benefit from more structured learning
 - Will learn coding of Arduino Board



USERS

- Teachers
 - Experience in delivering interactive learning
 - Require support to facilitate activities



COMPONENTS

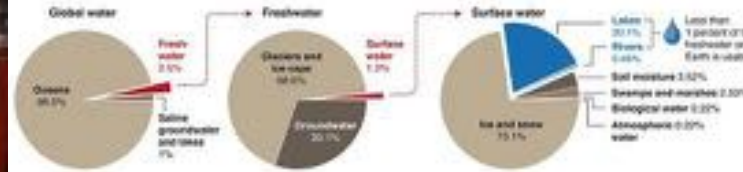
- Outdoor space
- Planters
- Irrigation
- Educational material & charts etc



The Water Cycle

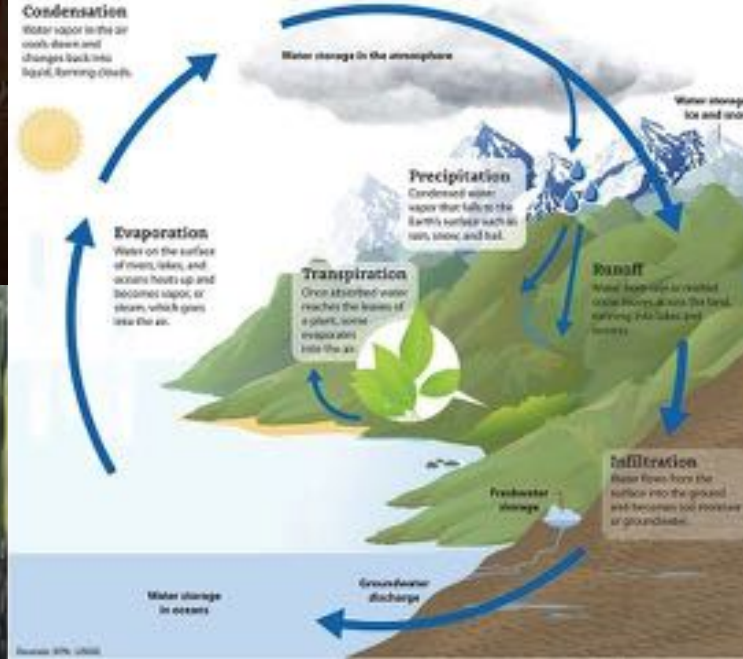


When you get thirsty, you might simply reach for a glass and fill it with water from the tap. That water might have fallen from the sky as rain just last week. But the same water has been around for pretty much as long as the Earth has. Earth's water is always in motion—a continuous cycle on, above, and below the surface. This is the water cycle.



Condensation

Water vapor in the air cools down and changes back into liquid, forming clouds.



COMPONENTS

- Composting Area
- Bins
- “Compost Cam”
- Worm Farm



FOOD THAT *magically* REGROWS ITSELF

UPCYCLE YOUR FOOD SCRAPS FOR THE MOST HYPER-LOCAL FOOD ON THE BLOCK

GREEN BEANS, LEANING GREENS, LEEKS, FENNEL, & SPINACH BEANS

- 1: Chop up your scraps into 1/2 inch pieces.
- 2: In a 10-gallon bucket, layer 1/2 inch of scraps, 1/2 inch of soil, and 1/2 inch of water.
- 3: Harvest your greens in 10-14 days.

COLICY, CABBAGE, BRINISEL UTZUOL, & BAC CHY

- 1: Chop up your scraps into 1/2 inch pieces.
- 2: In a 10-gallon bucket, layer 1/2 inch of scraps, 1/2 inch of soil, and 1/2 inch of water.
- 3: Harvest your greens in 10-14 days.

CUCUR

- 1: Chop up your scraps into 1/2 inch pieces.
- 2: In a 10-gallon bucket, layer 1/2 inch of scraps, 1/2 inch of soil, and 1/2 inch of water.
- 3: Harvest your greens in 10-14 days.

MOON

- 1: Chop up your scraps into 1/2 inch pieces.
- 2: In a 10-gallon bucket, layer 1/2 inch of scraps, 1/2 inch of soil, and 1/2 inch of water.
- 3: Harvest your greens in 10-14 days.

GARLIC

- 1: Chop up your scraps into 1/2 inch pieces.
- 2: In a 10-gallon bucket, layer 1/2 inch of scraps, 1/2 inch of soil, and 1/2 inch of water.
- 3: Harvest your greens in 10-14 days.

MUSHROOMS

- 1: Chop up your scraps into 1/2 inch pieces.
- 2: In a 10-gallon bucket, layer 1/2 inch of scraps, 1/2 inch of soil, and 1/2 inch of water.
- 3: Harvest your mushrooms in 10-14 days.

PUMPKINS & SWEET POTATOS

- 1: Chop up your scraps into 1/2 inch pieces.
- 2: In a 10-gallon bucket, layer 1/2 inch of scraps, 1/2 inch of soil, and 1/2 inch of water.
- 3: Harvest your pumpkins in 10-14 days.

PINEAPPLE

- 1: Chop up your scraps into 1/2 inch pieces.
- 2: In a 10-gallon bucket, layer 1/2 inch of scraps, 1/2 inch of soil, and 1/2 inch of water.
- 3: Harvest your pineapples in 10-14 days.

CAROLINE

WHOLE FOODS MARKET

COOKING BYRON

Composting 101

How to Start a Compost Pile

WHAT IS COMPOST?
Compost is decayed organic matter that is a great plant fertilizer, also known as black gold.

HOW DOES IT WORK?
Oxygen-powered micro-organisms break down the organic matter by digesting it. Over time, secretions from these soil organisms result in a crumbly, fragrant brown soil. The only ingredients necessary for successful compost include air, water, green material and brown material.

WHAT TO ADD TO THE PILE

Nitrogen (Fresh Greens)

- Grass
- Vegetable and fruit waste
- Weeds
- Coffee grounds
- Manure from herbivores
- Eggshells

Carbon (Dry Browns)

- Dead leaves
- Hay or straw
- Pine needles
- Sawdust
- Shredded paper and cardboard
- Wood ash

Don't Add

- Oily or fatty food
- Animal products or by-products
- Manure from carnivores

KEEP THE PILE MOIST
The pile needs to be kept moist to do its job, so if rain isn't sufficient, be sure to water the pile so that it is moist but not soggy.

TURN THE PILE
Every couple of weeks or so, aerate the pile by turning it over with a shovel, turning the tumbler or using a compost aerator.

Composting 101

What you can and can't compost

40% of household waste is compostable in Canada.

Transform your waste into black gold with that has nutrients to compost!

What to compost:

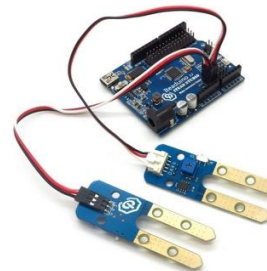
Green Materials
Rich in nitrogen

Brown Materials
Rich in carbon

What not to compost

COMPONENTS

- Arduino Board
- Temperature Sensor
- Moisture Sensor
- Light Sensor
- Graphical Display
- Connectivity

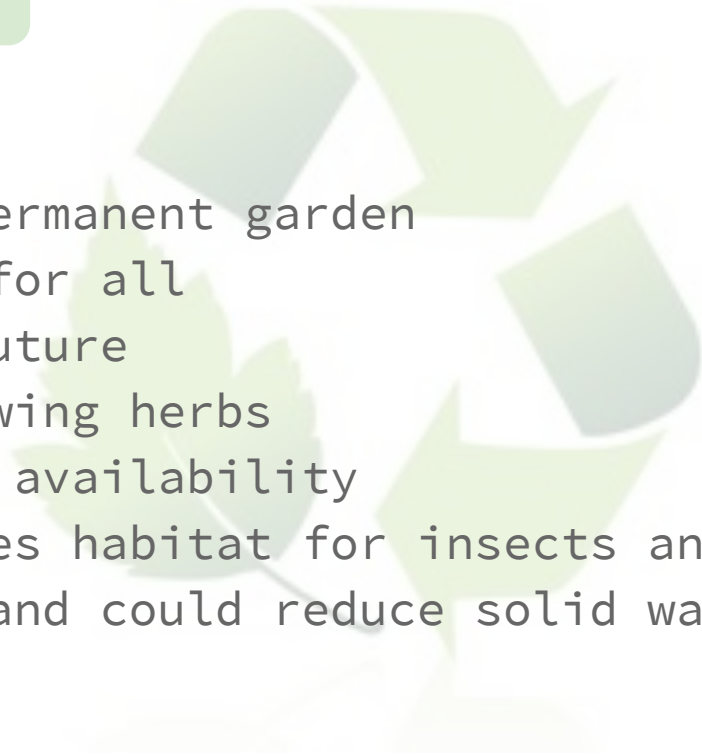


THE APP



SUSTAINABILITY

- Give schools permanent garden
- Accessibility for all
- Kids are the future
- Select self sowing herbs
- All year round availability
- Compost provides habitat for insects and earthworms - benefits soil and could reduce solid waste up to 75%



TAKING IT FORWARD

- Presentation to head teachers
 - create pack to disseminate to teachers
 - deliver info sessions
 - pilot in two/three schools
 - communication plan via usual channels
- Produce leaflet for parents
- Dedicated website

