Investigating the plant life cycle for teachers

This activity will require a combination of outdoor learning and classroom learning. Materials needed include:

<u>Task 1</u> chalk bare concrete (school playground) vegetated area <u>Task 2</u> vegetated area pencils A3 paper stopwatch

<u>Task 3</u> Art supplies (colour pencils, crayons, craft paper) natural plant materials scissors glue sticks stop motion app/software

Task 1: Investigating plant parts

Learning intention: To describe the structure of a plant



1. Draw!

Ask students to "Draw a plant" as a form of diagnostic assessment. Collate drawings to construct a collaborative class drawing of a labelled plant in chalk outside in the playground.



2. Discuss!

Discuss any features students may have missed in their drawings and why they may have missed these parts.



3. Collect!

Ask students to explore the schoolyard and collect samples of each stage of a plant's life cycle. Be sure to tell students to only collect what is on the ground and no longer being used by the plant.



4. Sort!

Students then sort their materials by placing them on the correct part of the big plant diagram, creating a large artwork.



Task 2: Life stages in detail

Learning intention: To investigate each life stage of a plant in detail



1. Collect!

Divide the class into quarters and allocate each group as leaf, flower, fruit or seed. Ask each group to find and collect a piece of their allocated plant part in the playground. Be sure to tell students to only collect what is on the ground and no longer being used by the plant.



2. Draw!

Once collected, provide students with 30 seconds to sketch their plant part on an A3 piece of paper.



3. Rotate!

When this time has elapsed, each group leaves their drawings with their plant part, and rotates to the next plant part.

At the next station, give students longer (e.g. 1 minute) to edit the previous group's drawing of that station's plant part.

Continue to rotate (providing longer time at each new seed) until students return to their original plant part.



4. Reflect!

Ask students to reflect on what has been added, and details they missed upon first observation.



5. Re-draw!

Students then redraw their first plant part with unlimited time, adding labels to describe the external features of their plant part. For each feature, prompt students to consider the colours they see, the sizes of features, how each feature feels, or evidence of any interactions with other living things.



Task 3: Putting it all together

<u>Learning intention</u>: To relate parts of the plant as life stages by creating a stop motion video of the life cycle of a flowering plant.



1. Plan!

Create a storyboard of 30-40 frames depicting the life cycle of a flowering plant in succession. Start with the seed and finish with a reproductive adult. Each successive frame should add to the previous frame to create a sense of movement.



2. Snap!

Using natural materials found in their schoolyard (from Tasks 1 and 2) or art supplies, create and take a photo of each frame and take a photo of each frame using your chosen stop motion video app or software.

This activity may be completed individually or in groups.

<u>Alternative tasks:</u>

- Compose a play or a dance demonstrating the life cycle of a plant
- Write a narrative from the perspective of a seed which has just dropped in the soil

