208B: 1 Assignment Example
Elementary Level

DHH TPE 1.2: …engage with students using multimodal instruction (signed, spoken, and/or written) scaffolding, multiple ways of representing content, and teaching strategies to address the specific needs of student learning,…
DHH TPE 5.4: Evaluate instructional practices, … of academic, linguistic, and socioemotional…

#1: Learning Activity	**1st List Initial Lesson Plan Activities at their specified level**	**2nd: List Added Activities created to increase the level of engagement.**
Phase 1: A quick read	None	Orally read directions in unison and include pictorial prompts.
Phase 2: Hear content	Brief lecture on plant growth	Veins in celery are like the veins in our body.
Phase 3: See content	Colored water w/celery. With & w/o leaves.	Same
Phase 4: See & Hear	Lecture & results of red dye in plant – follow directions	Same
Phase 5: Discuss	Prediction - contributions	Chart each student's prediction and discuss.
Phase 6: Experience	Students observe color changes. C&C results and why.	Same Observe and gather other types of leaves in the school environment. Compare & contrast. (C&C)
Phase 7: Discovery	Prediction of fluid movement	Shows how leaves create energy from air and sunlight, which causes more dye to come up the stem.
Phase 8: Teach		Students take a small piece of celery (with red veins) home and teach their parents how leaves influence circulation. A worksheet is filled out and returned as homework.
Project Questions	#3. Phases of engagement _*6 phases used*_	#4. Phases of engagement _8 phases used_

*Attach the improved lesson plan.
Final Question: *Is the learning now active and alive, or is it dull? Explain why.*

Attached lesson plan…

Spring Is Sprung: Water Movement in Plants

Get to the bottom of how water gets to the top of plants.

Grades Pre-K, 1-2

Group lecture: With the coming of spring the days get longer, the air gets warmer and the birds begin to sing. As you look around, you see many changes taking place but the most stunning transformation has to be in the plants. Almost magically, barren branches start to bud, brown grass turns green, and tiny little shoots push up through the soil. How does this happen? Does mother nature send plants a wake-up call?

Well, in a sense, yes. But one way that plants awaken is with water. In fact, you could say that when the sap starts flowing, it's keen to be green! How does water move around in plants? Do the leaves pull it up, or are their other forces at play?

Experiment

Here's a challenge for you that lets you get to the bottom of how water gets to the top.

Phase 1: Orally read directions, then repeat each phrase in unison and include pictorial prompts. *(Objectives: Listening, speaking & applying.)*

Here's a chart of what you'll need to play along: (Include simple pics of items to help students read.)

- 2 large glasses of water
- Red food coloring
- 2 fresh stalks of celery with leaves
- A spoon
- A plastic knife

Step 1: Put two or three drops of food coloring in each glass of water and mix them up with the spoon.

Step 2: Take one celery stalk and remove all the leaves from it. Leave the other alone.

Step 3: Use the knife to cut about 1 centimeter off the bottom of each stalk and place each stalk in one of the glasses with the red water.

Step 4: Put the two glasses side by side in direct sunlight (or under a lamp) and allow them to sit for about 24 hours.

Phase 2: Veins in celery are like the veins in our body. Examine arms and neck for veins under the skin.

Phase 5: Chart each student's prediction and discuss.

Okay, so here's the challenge question: Which stalk of celery do you think will "drink up" the most water, the one with leaves or the one without? Before starting the experiment, write your predictions. After you've let the celery sit for 24 hours, cut off the tops of the celery to see if the inside is dyed red. Do leaves help to pull up the water, or

does it get through the plant by some other means? I know you're "dying" to find out, so get busy and make your predications.

Phase 6: Observe and gather other types of leaves in the school environment. Compare & contrast. (C&C)

Phase 7: Shows how leaves create energy from air and sunlight, which causes more dye to come up the stem.

Phase 8: Students take a small piece of celery (with red veins) home and teach their parents how leaves influence circulation. A worksheet is filled out and returned as homework.

Notes to Teachers

Curriculum Focus: Science/Plant Biology/Water movement in plant growth

Learning Outcomes:

- Using food coloring, track the movement of water through two celery stalks — one with and one without leaves. Observe the path that water takes to get to a leaf.
- Predict how leaves affect plants' absorption of water.
- Observe the capillary action in plants.

Web Links

For more information on plants, try these websites:

Welcome to Missouri Botanical Garden
The Missouri Botanical Garden's site offers extensive information on different biomes and ecosystems and their plants, from the rain forest to the grasslands, the desert to the wetlands.

University of Wisconsin-Madison Botanical Garden
Access various families of plants and view pictures of each.

5 points