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TE 804
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Post Assessment Analysis and Unit Reflection

Task 1 Name: My Plant Book

Task Description: Students will be given a book to fill out. The book requires students to answer questions about the seeds they previously planted. Questions consist of ordering pictures representing a plants life cycle, the number of seeds they planted, and the basic needs a plant requires to grow and survive.

Rationale: Using Content Standards L.OL.E.1 Life Requirements- Organisms have basic needs. Animals and plants need air, water, and food. Plants also require light. Plants and animals use food as a source of energy and as a source of building material for growth and repair. This task will allow students to show if they understand the process of a plants life and the basic needs required.

Task Response Features that you are looking for:

1.) How many seeds did you originally plant?
2.) Can you order pictures to show how a seed grows in a flower?
3.) Can you circle three things a plant needs to grow?

Task 2 Name: Growing a Plant

Task Description: Students will be given 6 pictures which represent the process of growing a plant. Each picture shows another step in the life a plant growing from a seed. Students will be required to color the pictures, cut them out, and then glue them in order on a long piece of construction paper. The final result should show a seed starting out in a flower pot and then eventually growing into a plant with a stem and leaves.

Rationale: Reflecting Benchmarks (R) II.1.e.2 Show how science concepts can be illustrated through creative expression such as language arts and fine arts. This task will allow students to creatively show they understand the steps a seed goes through to grow into a healthy plant. It requires students to learn words such, root hair, stem or shoot, leaves, flower.

Task Response Features that you are looking for:

1.) Students can identify the first part of a plants life (the seed).
2.) Students understand the seed must sprout roots next.
3.) Students show that the shoot or stem next sprouts.
4.) Students show that leaves and a flower then begin to grow in the process.

Student Response Form (Complete 1 Form for each Assessment Task)

Unit: Living and non-living things Task: My Plant Book Intern: Cory Morrow

Student #	How many seeds did you plant?	Can you order pictures to show how a seed turns into a flower?	Circle three things you think a plant needs to grow into a flower.	**# of goal features**
1	X	X	X	3
2	X	X	X	3
3	X	X	X	3
4	X	X	X	3
5	X		X	2
6		X	X	2
7	X	X		2
8	X	X	X	3
9	X	X		2
10		X	X	2
11		X	X	2
12	X		X	2
13	X	X	X	3
14	X		X	2
15	X	X	X	3
16	X		X	2
17	X	X	X	3
18	X		X	2
19	X	X	X	3

#	16	14	17	
%	84%	73%	89%	

Student Response Form (Complete 1 Form for each Assessment Task)

Unit: Living and non-living things Task: Growing a Plant Intern: Cory Morrow

Student #	Can identify the first part of a plants life (seed)	The root hair sprouts next.	The plant seed then grows a stem or spout.	Finally the stem grows leaves and a flower.	**# of goal features**
1	X	X	X	X	4
2	X	X	X	X	4
3	X	X		X	3
4	X	X	X	X	4
5	X	X	X	X	4
6	X	X	X	X	4
7		X	X	X	3
8	X		X	X	3
9	X	X	X	X	4
10	X	X	X	X	4
11	X			X	2
12	X	X	X	X	4
13		X	X	X	3
14	X	X	X	X	4
15	X	X	X	X	4
16	X	X	X	X	4
17	X	X	X	X	4

18	X	X	X	X	4
19	X		X	X	3
#	17	16	17	19	
%	89%	84%	89%	100%	

Analysis of Patterns:

Task 1:

After filling out the student post-assessment chart I was better able to see the understanding of my students. The first question of the assessment required students to think back to when they planted their own seeds in during a hands-on experience. I was a little surprised to see that only 84% of students actually remembered how many seeds they planted. This surprised me because I felt I had really stressed the importance of planting more than one seed in order to have a better chance of one of our seeds growing. Still however 16 out of 19 students did recall this. This question was more geared to get students thinking and reflecting back to the prior activity. The second question required students to look at four pictures and assign them a number according to the order that best represents the process of a plants life from seed to flower. The assessment showed me that 73% of the students could accurately number all four pictures. 14 out of 19 of my students were able to complete this task accurately. The 5 other students confused at least two pictures which threw off their ordering. The last question required students to look at four pictures and identify the three things a plant needs to grow and survive. This question received the most correct responses at 89% with 17 out of 19 students answering accurately.

Task 2:

The second post assessment task was meant to work more with students showing the process of a plants life. Since students had the hands-on experience with planting a seed and numerous class discussions had taken place regarding a plants life and the different steps it takes for a seed to turn into a flower I was confident in this assessment task. This assessment also differed from the other task because it required students to look at 6 different pictures and physically order them. Students had to keep in my certain terms such as root hair, shoot, and leaves when looking and ordering the pictures. The first question observed was if students understood the seed was the first part of the plant, 89% of students were able to begin the assessment off knowing which picture came first. The second question was being able to recognize the root hair is the first major change in the seeds life cycle, 84% were able to show this. The third part was showing the stem or shoot begins to sprout and is the following big step in the plant cycle, 89% of students were able to show this in their assessment. The final part was showing the last step in the plant life cycle is a stem with leaves and a flower, 100% of students were able to show this.

Reflection:

The living and non-living things unit allowed students to explore science concepts using hands on, creative activities. The main learning goal of the unit was students will be able to identify living and non-living things and use characteristics to sort and classify. The unit started off with students identifying pictures and items that they thought were either living or non-living. As a class we conducted a discussion as to why students thought these items were living and non-living. The opening activity allowed me to better see the prior knowledge my students

contained and how to better approach the unit. The one thing I really found from this opening lesson was that students did not think plants, grass, and trees were living things. Students recognized people and animals as living things but did not contribute plants into that category. From this information I was better able to create lessons which would allow students to make connections between the differences between living and non-living things and how living things have basic needs.

The unit followed the inquiry model plan allowing students to use experiences to make connections and form patterns with the goal of being able to form explanations. I tried to engage students not only through hands on activities but through science talks that really required students to take responsibility and learn through each others ideas. I tried to make these science talks more student lead which helped students gain confidence in their ability to form their own patterns. By creating a science environment where students were given the opportunity to learn through hands on experience and science discussion students were able to soon gain a strong understanding of living and non-living things.

The first part of the unit really focused on the differences between living and non-living things. This allowed students to connect the idea that living things are alive and in order to be alive you have basic needs such as food, water, sunlight, and air. Students were then able to take this understanding of basic needs to explore plants more. By planting seeds on their own and watching them grow students were better able to see that plants have basic needs just like humans and animals. In order to show this even better we planted two class plants giving one of them sunlight and water and the other neither sunlight or water. Students learned how to make predictions based on the knowledge they contained. We checked on both our plants a week later and students drew pictures of their observations. Students were able to form an even stronger

connection by seeing that the seed which was given no sunlight or water did not grow while the seed given its basic needs did begin to grow.

The post assessments helped show me how well my students understood the concepts taught throughout the unit. The first task required students to demonstrate all the skills taught through the unit. It required students to reflect back to their own seeds they planted, show the life cycle of a plant, and show the basic needs of a plant. Students did relatively well with this assignment but I did notice students had a difficult numbering the pictures showing the correct order of a plants life. This made me want to conduct another assessment which primarily concentrated on that skill. Task one did show me that students had a strong understanding of plants basic needs. I was very pleased to see that because the needs of living things were stressed in almost all of the science lessons. Task 2 required students to take 6 pictures of a seed and place them in the correct order showing how the seed grows into a plant. This assessment went well but I realized the differences in the pictures could have been distinguished better. Students had a hard time differentiating between the first two pictures because they looked so similar, there was little difference between the two. Students did an excellent job showing that the seed did start the plants life off and the flower was the ending result.

I believe my tasks helped show how my teaching of the unit went. Students really gained a lot of knowledge about living and non-living things. They now understand that plants are living things and all living things have specific basic needs. The assessments helped show me that if I were to do this unit again I would try and focus more on the process of a seed growing into a plant. Students loved planting their own seeds and watching them grow, but more class discussion could have occurred each day as we watched our plants grow. I could have presented my students with higher level thinking. If I asked students more questions about why their plants

were growing or why the root hair was now showing then I think students could have formed an even stronger connection. For the most part this unit was a success, not only did the students enjoy it but they really gained some strong, fundamental knowledge that will help them as young scientists.