**College of Saint Mary**

**Lesson Plan Maker Variation for Undergraduate Students**

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| **LESSON/ACTIVITY INFORMATION** | | | | |
| **Title: What is inside of a seed?** | | | | |
| **Your name: Kayleen Malizzi** | **Age or Grade Level: Kindergarten and First Grade combined** | | **Integrated Disciplines/Subjects: Earth and Living Science** | **Time frame for Lesson: Lesson 45-60 minutes** |
| **STANDARDS, OBJECTIVES, ASSESSMENTS & MATERIALS** | | | | |
| [**Nebraska State Standards**](http://www.education.ne.gov/academicstandards/index.html)**;** [**Nebraska Early Learning Guidelines**](http://www.education.ne.gov/OEC/elg.html) **and** [**NET-S**](http://www.iste.org/docs/pdfs/nets-s-standards.pdf?sfvrsn=2) **(as appropriate for the lesson):**  **SC2.3.1 Students will investigate the characteristics of living things.**  **SC2.3.1.a Differentiate between living and nonliving things.**  **SC2.3.1.b Identify the basic needs of living things (food, water, air, space, shelter).**  **SC2.3.2 Students will recognize changes in living things.**  **SC2.3.2.b Describe how living things change as they grow.**  **SC2.3.1.c Identify external parts of plants.**  **SC2.4.3.a Observe that the Sun provides heat and light**  **SC2.1.1 Students will ask questions and conduct investigations that lead to observations and communication of findings.**  **SC2.1.1.b Conduct simple investigations**  **SC2.1.1.c Select and use simple tools appropriately** | | | | |
| **Objectives:** *Make certain to include When, Who, What and How (criterion for success) in your objectives. You may find terms related to* [*Bloom’s Taxonomy of Cognitive Development*](http://img.docstoccdn.com/thumb/orig/27373481.png) *helpful in formulating your objectives. Sample lead in phrases for writing learning objectives are listed below.*  During the activity, the child will be able to:  **OR**  The students will be able to:  1. Dissect a seed and identify the parts and their functions.  2. Discover where seeds can be found.  *3. Learn how seeds travel.*  *4. Predict and observe what seeds need to grow.* | | | | |
| **Assessment:** *Must link to the objective above – assessments can be either formative or summative. You must clearly describe strategies and tools used to document student learning.*  **Students will label and describe the parts of a seed correctly.**  **Students will list numerous ways in which seeds can travel.**  **Students will list and define the necessities of a seed.** | | | | |
| **Materials:**   * **“The Tiny Seed” By: Eric Carle** * **Magnifying glasses for each student** * **A dry pinto bean for each student** * **A soaked pinto bean for each student** * **Paper plate for each student** * **Pinto bean worksheet** * **Pencil** * **“The Magic School Bus: Goes to Seed” Video** | | | | |
| **LESSON PROCEDURES** | | | | |
| **Anticipatory Set:** *How will you hook the students into your lesson? How will you involve as many as students as possible, piquing their interests for the subject matter to come? How will you inform your students of the lesson’s context and objective, in student-friendly language?*  ***Start the lesson with a review on living and non-living things then jump into reading a story and asking questions to get students involved in discussion at the beginning of the lesson.*** | | | | |
| **Input/Modeling/Guided Practice/Check for Understanding:** *The following section must include all of the steps the teacher needs to do in order to carry out the lesson and must also include all of the responses and activities that students will be expected to do.*  ***DETAILS*** *are important here in order to demonstrate your thinking of what this will look like in the classroom. Write this section so that the lesson could be easily replicated.* | | | | |
| **Teacher will do:**  **Lesson borrowed from:**  **Reference/Resource Used: http://www.scholastic.com/teachers/lesson-plan/seed-sensation**  **Part I**  **Step 1: Distribute a dry pinto bean and magnifying glass to each student. Remind them not to put it in their nose, ears or mouth! Ask the students what they think it is. Some will say a bean; others may say it is a seed. Tell them that it is a bean, which is a kind of seed. Ask: What is the job of a seed? Tell them that today we will discover the job of a seed. We will dissect, or open up, the seeds and look inside. Ask the students to open their seeds (without using their teeth) and describe what they see inside.**  **Step 2: After a few minutes, ask if anyone has opened their seed. Probably no one has been able. Ask the students what they wear when it is cold outside (a coat). Tell the students that a seed has a coat covering it until it is ready to grow. Right now it is asleep, waiting to wake up. It may sleep for a week, a month or even a year until it has the right amount of water and warmth. The seed will need water and the soil must be warm enough for it to grow.**  **Step 3: Distribute the soaked pinto beans to each student. Ask them to compare them to the dry one. Inform the students that these pinto beans have been soaked in warm water to imitate the warm soil. Invite the students to try to open these seeds and observe what is inside using their magnifying glasses. Most will see a new plant growing. If they do not find one, give them another bean.**  **Part II**  **Step 1: Gather the students together and ask what they saw inside the seed. Ask one student to draw what they observed on chart paper. Label the parts of the seed for the students with lines extending from the three parts: seed coat (the outer area), food (inside the bean) and the new plant.**  **Step 2: Invite the students to draw a picture of the inside of their seed, label its parts and paint them.**  **Step 3: Gather the students back together and ask them to tell about the new plant they saw in their seed. Ask the students what they think the new plant will do (grow). Ask: Then what is the job of a seed? (To grow into a plant).**  **Have students watch Magic School Bus video** | | **Student will do:**  **During Group/Circle time:**  **Listen to the story and actively participate in answering teacher questions. (\*\* I will allow discussion amongst the group.)**  **Go back to table:**  **Experiment/hands-on: Follow through with the dissection of a dry and wet Pinto bean. (\*\*I will ask questions frequent questions during student’s observation time and will encourage student responses.)**  **Label the parts of a pinto bean (the seed).**  **Watch Magic School Bus video** | | |
| **Closure:** *Can be whole group review or opportunities for individual responses.*  **Circle time/ large group: I will gather students back together and ask them to tell me about the new plant they saw in their seed. Ask the students what they think the new plant will do (grow). Ask: Then what is the job of a seed? (To grow into a plant).**  *Examples might include: Thumbs up/thumbs down (whole class assessment); 3-2-1 Three things you learned, two questions you have and one thing you liked. 3 What’s: What did we learn today? So what? (How is this important? relevant? useful?) Now what? (Follow up? How does this relate to our unit outcomes?)* | | | | |
| **Differentiation:**  *Describe how will you differentiate for varying student needs by identifying at least two distinct areas of learning needs and describing appropriate accommodations related to methods of instruction and student(s)’ ability to show evidence of learning*.  **I will make it available for students who may need further guidance in the lesson to be assigned to a partner, a para and a partner, or myself. This allows the student to get the attention they will need in order to be successful. Also I will give easy to follow/ step by step instruction and will be demonstrating briefly what I expect each student to do throughout the activity.** | | | | |
| **References:** *Include references used to prepare the lesson plan and references for items used in the lesson (ex. Books read to the students). NOTE: Make sure to acknowledge any co-authors if you are modifying a lesson that you may have created with another person,*  *Book source: “The Tiny Seed” By Eric Carle*  *Video source: “Magic School Bus: Goes to Seed”*  *Website sources:*  [*http://www.scholastic.com/teachers/lesson-plan/seed-sensation*](http://www.scholastic.com/teachers/lesson-plan/seed-sensation)  [*http://mcdn1.teacherspayteachers.com/thumbitem/Label-Parts-of-a-Seed-053601000-1373990169/original-774173-1.jpg*](http://mcdn1.teacherspayteachers.com/thumbitem/Label-Parts-of-a-Seed-053601000-1373990169/original-774173-1.jpg) | | | | |
| **LESSON ANALYSIS**  *Review all of the previous sections of your lesson plan* ***and***  *Complete item in the following section prior to teaching your lesson.* | | | | |
| **Content Knowledge:**  *Describe how your lesson addresses required content knowledge that you must help the students to understand.*  *Students will already know that plants are a living organism after reflecting on the living and non-living lesson from the previous week. Students will learn all about seeds including:*  *How seeds travel,*  *The parts of a seed, and*  *What a seed needs to survive.*  *By the end of the lesson students will be ready to move on to what happens after a seed starts to grow.*  **Teaching Methods/Strategies:**  *Identify the specific teaching method(s) that are included in this lesson and describe why you believe this/these method(s) will be effective in helping students meet the learning objectives?*  ***Read-a-loud, discussion, hands-on activities with instruction/ demonstration, video.*** | | | | |
| **REFLECTION**  *After teaching the lesson, write a reflection to evaluate how you feel the lesson went (flow, timing, materials, etc.) and write a clear description about evidence of student learning. This description should directly refer to your plans for Assessment including your documentation strategies.* | | | | |
| *Use the following thought questions to help you write your reflection.*   * *Review your assessment results. Did each child meet the objective? How do I know that each child learned what was intended?* * *Were the children productively engaged? How do I know?* * *What unplanned activities occurred? Why did these occur?* * *Did I alter my instructional plan as I taught the lesson? Why?* * *What additional assistance, support, and/or resources would have further enhanced this lesson* * *If I had the opportunity to teach the lesson again to the same group of students, would I do anything differently? What? Why?* | | | | |

Modified by Dr. M. K. Felton

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