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Science Methods
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Lesson One: Guided Discovery
Where Are Seeds Found? How Are Seeds Alike and Different?

Grade Level: 2nd Grade

Standards:

2.1.1 Manipulate an object to gain additional information about it.

Objectives:

1. When given different fruits, students will understand that all of them have seeds with 100% accuracy.
2. When looking at seeds, the students will be able to describe differences between the seeds 3 out of 4 times.

Advanced Preparation by Teachers:

Materials: paper plates, plastic knives, a variety of fresh fruits (children might be encouraged to bring a fruit from home)

Procedures:

Introduction (Engage): Ask: *Are there seeds in each of these fruits? How many seeds are in each of the fruits?* (Bloom's Knowledge) *How can we find out?*
(Application)

Step by Step Plan:

Step 1 (Explore): Distribute paper plates and several fruits to each group.

Step 2: Tell children to use their plastic knives to cut their fruits open. They should find and observe the seeds in each one. (Gardner's Kinesthetic)

Step 3 (Explain): Ask: *Did you find seeds in your fruit? How many seeds did you find? What are the properties of the seeds?* (Bloom's Knowledge) *How are they similar? How do they differ?* (Bloom's Analysis) (Gardner's Interpersonal)

Closure (Elaborate): Tell the students to take turns sorting the seeds on the paper plates.

Ask: *How have you sorted the seeds?* Allow groups to describe and explain how they sorted the seeds. Lead students to compare and contrast the different ways they have sorted the seeds and to discuss the best ways to sort them.

Adaptations/Enrichment: For gifted students, I would set out books about fruits and seeds. I would have them go further into classifying them and looking at more information about them. For MiMH students and LD students, you may want to give them specific categories to classify the seeds into. They should be able to participate with everyone else in the discovery part.

Assessment: For this lesson I would use both formative and summative assessment. As I am walking around, I will be able to see if they are discovering the seeds in the fruit. At the end, I will have them classify their seeds into two groups. Then write down the characteristics that separate each group, and the seeds that they placed in each group. This will show me if they understood that seeds are different and see if they can identify with what characteristics are similar and different between different seeds.