Lesson Unit Title: Trees/Planting in the Root View Container, and Caring for a Plant

Target Grade Level: Pre-K (Special Education)

Class/Content Areas: Science, Social-Emotional Development, Language Development, and Physical Development

Time Allotment: 30 minutes, and then additional 10 minute sessions

Standards: (All are from the California Preschool Learning Foundations)

- Science: Observation and Investigation: 1.0: Demonstrate curiosity and an increased ability to raise questions about objects and events in their environment.
- Science: Life Sciences: Changes in Living Things: 2.0: Observe and explore growth in human, animals, and plants, and demonstrate an increased understanding that living things change as they grow and go through transformations related to the life cycle.
- Language and Literacy – Listening and Speaking Foundation 2.2: (Vocabulary) Understand and use accepted words for categories of objects encountered and used frequently in everyday life.
- Social-Emotional Development 3.1 Participate positively and cooperatively as group members.
- Physical Development: Manipulative Skills 3.2: Begin to show fine motor manipulative skills using hands and arms such as in-hand manipulation, writing, cutting, and dressing.
Abstract: Students will be introduced to the planting and care of vegetable plants.

Objective: Students will be able to plant seeds, understand that plants need soil, sunlight and water, talk about the plant parts, and remember to water it (responsibility). As we are growing vegetables, a further objective is to learn about nutrition and where fresh food comes from.

Background information: Students will learn tree/plant parts (roots in particular) and learn what trees/plants need to survive (good soil, water and sunlight). For some of them, planting might be a new skill, so the steps will need to be taught.

Materials:

- Root view planter
- Soil pellets
- Spoons
- Water
- Radish seeds
- Onion seeds
- Carrot seeds
- Eye droppers

Instructional Procedure:

Introduction: Read a book about planting. Ask who has planted something at home, what they planted, and what they did to care for the plant. Sing and do hand motions for the song, “I
planted my seed in the ground, the sun shone all around, the rain came falling down, and a tree
grew up for the ground.”

Activities: Students will be given soil pellets in a bowl, water, and a spoon. They will “create”
soil by mixing and chopping, or asking for more water if needed. Then they will spoon the soil
into the root view planter, plant the seeds, and water the plant. Additional observations and
watering will occur over the weeks/months. Students will also get eye droppers and bowls of
water to water the plants. This will allow for many to water at the same time, but not over-water.
It will also allow for fine motor practice and hand-eye coordination as the root view container is
very narrow. On some days, those who cannot do the droppers can water the plants using a small
cup or watering can. We will take photos to track the growth over time. We will discuss what the
students are seeing, and what questions they have. As far as general instructional strategies, I
will use preferred items (plants, water, and hands-on activities) praise, visuals, direct and open-
ended questions, dialogic reading, language models and language expansion. To help them
develop social interaction, I will encourage them to work together as they water the plants. Key
vocabulary words will be leaves, roots, seeds, soil, water, sun, dry, and moist.

Closure: Review photos in a slide show to show growth over time. Harvest and eat the
vegetables.

Check for Understanding/Assessment: Understanding will be assessed through the use of
small groups and the use of both direct and open-ended questions. Using the guidelines of
Universal Design for Learning, I will differentiate for individual children by using a variety of
methods to teach the same concepts and to engage them, and provide a variety of ways for them
to express themselves and participate. (For example, small cups or watering cans for those who cannot do the eye dropper watering method.) In order to engage them, I will be using preferred items (plants and water) and will use stories, music, movement, and photos. As far as their expression and participation, I will provide verbal ways for them to participate as well as non-verbal ways for those who are pre-verbal, such as watering and harvesting the plants, hand motions for songs, and listening to stories.