# THAD Therapeutic Horticulture Activity Database

# Activity: Planting Goal: Cognitive/Intellectual Populations: All

# TH Activity Plan - Seed Tape

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Photo by Tossed, Gregalder.com & Savvy Gardening



#### Materials

Toilet paper or paper towel

Small cup, popsicle stick for mixing, small paint brush

Water, markers, plant labels

Seeds (consider seeds that can grow easily together – lettuce, carrots, arugula, marigolds

Gloves, wipes

**ACTIVITY DESCRIPTION:** Participants will make seed tape that makes planting tiny seeds easier.

### **THERAPEUTIC GOALS:**

Cognitive/Intellectual: Conceptualize planting, growing & thinning plants; use spatial reasoning; demonstrate reading & counting

**Physical:** Practice eye-hand integration

**Psychological/Emotional:** Plant positive thoughts; support the nurturing of plants/new life

**Sensory:** Practice eye-hand motor integration with a focus on sensory integration

**Social:** Increase tolerance for people with differences (hearing loss, learning differences, difficulty counting)

## **STEP-BY-STEP PROCESS:**

- 1. **Pre-Session Preparation:** Gather materials. Make sample seed tape.
- 2. Facilitator begins session by having a selection of seeds in different shapes, sizes and colors to highlight that seeds, like people, come in all sizes. Introducing the activity as a way to make planting small seeds easier, makes a TH activity of creating the seed tape active prior to planting. Pass the sample seed tape around.
- 3. Materials are distributed in the order that they will be used, beginning with a small cup, flour, water & coffee stir stick each. Mix small parts of each together to make "glue" for the seed tape.
- 4. Using colored paper, toilet paper or paper towel, these become the material for the tape onto which the seeds will be glued. There is no standard size for the tape but typically strips work well, like toilet paper width.
- 5. To prevent overcrowding of seeds, and to promote reading, look at the seed packets & their instructions for spacing seeds, then mark the paper with dots in appropriately spaced formation for seeds. Count the number of seeds to be used.
- 6. Place a dot of "glue" every inch and half or as packet instructs. Using the brush, pick up and place a seed on the dots. Allow to dry.

  Participants can take their seed tape with them, or used for the next TH session. Roll up the seed tape on toilet paper cardboard rolls, making jokes about using toilet paper and its rolls.

**APPLICATIONS FOR POPULATIONS:** Making seed tape is a form of adaptive gardening - planting small seeds can be made easier through the use of seed tape. Sharing this concept with participants may resonate with them, especially if they use accommodations for arthritis, learning differences, hearing loss or other challenges.

Integrating comments about tolerance for others with disabilities, learning differences, and how accommodations can support the ability to do tasks, work at the speed of others, or be accepted, contributes to wellbeing of themselves and others. The concept of differences can also be discussed in terms of seed shapes, sizes and colors, and that plants grown from seeds can take many forms though they start small. They can become tall, short, colorful and thriving. For populations that might find these concepts too abstract, having seeds, and mature plants grown from seed, can reinforce concepts and lessons.

For populations or individuals who may be challenged handling small seeds, an accommodation of using larger seeds would be appropriate. This may correlate better to therapeutic goals of counting and/or practicing eyehand coordination, the latter particularly for people with vision impairment, stroke recovery or sensory integration deficits. Another accommodation could be using paper towel in the shape and size of the garden space (square foot gardening method). Spacing the seeds, and perhaps using a variety of seeds/plants with this method can provide for planting/growing that is spaced appropriately and not too crowded as plants mature, a mixed variety of plants in a given bed or that each participant has created, and perfectly fitted seed planting in a given space. Practice measuring, counting and spacing seeds on paper towel on a larger format can be helpful.

**SAFETY CONSIDERATIONS:** Facilitators are responsible for knowing poisonous and toxic plants and plant parts. Tiny seeds may not be appropriate for people living with dementia, people with intellectual disabilities or young children who may be tempted to put items in their mouths. Seeds can be a choking hazard.

**NOTES OR OTHER CONSIDERATIONS:** Seeds that are tiny and more challenging to handle include carrots, onions, spinach and radishes. Before opening the seed packets, have participants shake them to listen for the sound of seeds inside, in support of sensory integration and auditory inputs. Then work on developmental skills of reading the packet, noting the recommended spacing and days to germination. Measuring the inches on the seed tape, and spacing of seeds can support math and spatial reasoning skills.

Radishes (Rahpanus sativus) sprout in 5-7 days and can be harvested in 22-60 days. Carrots (Daucus carpota) germinate in 14-21 days; 55-80 days to harvest. Spinach (Spinacia oleracea) germinates in 7-10 days and typically has 50 days to harvest. Discussing ideal weather, temperature, and watering conditions will provide basic horticultural information for new or experienced gardeners along with how different varieties of the same vegetable can impact days to harvest, germination rates and plant attributes of flavors, size and shape.





#### **REFERENCES/ RESOURCES:**

Relf, D., & Morgan, S. (2024). <u>Checking seed germination rates.</u> University of Florida Therapeutic Horticulture Activities Database.

Soszynksi, D. (2018). Seed tape. AHTA Magazine 46(2).

UF/IFAS University of Florida. (2021). <u>DIY seed tape.</u> Gardening Solutions.

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TH Activity Plan form developed by Lesley Fleming, Susan Morgan and Kathy Brechner (2012), revised in 2024.