• **Activity**: Planting a Flower – for the purposes of this analysis we will evaluate planting one flower start (not bulb or seed). The only people present are the therapist and one client.

## • Area of Occupation: Leisure

### • Objects used and their properties:

- o Materials: water (cool or luke-warm), potting soil (semi-moist), flowers desired.
- Tools: small shovel and rake (rubber, plastic or foam handle with metal body), small towel or kneepads (soft cushion for knees, pads may have plastic exterior, optional), gardening gloves (leather or thick canvas), water pitcher or hose (plastic/ rubber and metal), weed puller/ auger (rubber/ plastic handle with metal body).
- o **Equipment**: sink for water or hose bib, land and soil where the flowers are to be planted.

## • Space Demands:

Need an approved planting area. The dirt should either be free of weeds, or use weed pulling for part of the process. The amount of space per flower will vary on the type and desired result from the gardener.

## Social Demands:

Social demands are very perceptual. Gardening habits vary from nonexistent to obsessive and might occupy the majority of time. Others may help by clearing weeds, digging holes, holding plants straight while filling in and around product, etc. Help is not required.

## • Sequence and Timing:

This task is completed within the seasons from spring to fall and is not typically done in winter. The activity should take place during the daytime. The specific hours completed may be changed for extreme weather (rain, heat). The process will begin assuming all products and individuals involved have been acquired and transported to the planting location.

- 1. Identify the location where the flower will be planted
- 2. Transport all products needed to the planting area.
- 3. Identify and discuss the products needed for the activity and their purpose.
- 4. Discuss the process of the activity.
- 5. Rake dirt to loosen top 4 inches.
- 6. Remove any weeds and undesired rocks, trash, wood chips, etc.
- 7. Use shovel to dig a hole 4 inches by length, width, and depth.
- 8. Place enough of the potting soil in hole to reduce size by approximately one inch all around.
- 9. If hole is now too small for plant, adjust so the plant will fit.

Introduction to Occupational Therapy

Activity Analysis-Planting a Flower

- 10. Remove plant from the pot by placing it at a slightly angled position (horizontally) and shaking gently while rotating to break the soil loose from the pot.
- 11. Remove plant from pot and place plant in the hole.
- 12. While holding the plant with one hand, use other hand to fill around the plant with soil.
- 13. Use enough soil that there is a slight mound around the base of the plant allowing it to settle with rain and watering.
- 14. Lightly pat and press the soil to secure the plant.

## • Required actions of any person:

### o Motor Praxis:

- **Coordination** Two hands needed. Rotating and patting. Supporting with one hand and filling in with the other.
- **Posture** Able to squat down and lift with legs. From a kneeling position be able to bend at the waist and support body with hands and arms while using one to two hands.
- **Strength & Effort** Lifting up to 40 pounds.
- **Mobility** Carry up to 40 pounds from a vehicle to the planting area.
- **Energy** Maintain movement for periods of up to 5-minute intervals. Resting is possible if needed.
- **Motor planning** Plan to be able to use handled tools. Squat and kneel while using hands, arms, and shoulders.

# Sensory and Perceptual

- **Tactile** Must be able to grasp the handles of tools, cope with texture of dirt on knees and hands as well as feeling dirty.
- Vision Only a few feet of vision is necessary. Be able to
- Hearing/ auditory Only auditory needed is to communicate with other participants.
- **Taste/gustatory** No Taste is needed.
- Smell/ olfactory No Smell is needed.
- Vestibular Be able to balance on knees as well as while carrying light to moderately heavy objects.
- **Kinesthesia**/ **proprioception** Being able to know where your hands, body, posture, and balance are in proportion to each other. Notice how close you are to tools and plants.

#### Emotional

- **Persistence** Be willing to continue when encountering unexpected barriers such as clay, rocks, bugs, and inclement weather.
- Control of Emotions Cope with frustrations if plans need to be changed and tools or materials do not work easily.

### o Communication / Interaction

• **Physicality** – Requires mostly light lifting. Squatting and maneuvering on fours to dig, plant, and water.

BJ Woolston OTA 1020 Introduction to Occupational Therapy Activity Analysis-Planting a Flower

- Information exchange Verbal communication with other participants may be required. Asking questions if the process is not understood or when problems arise.
- **Relations** Work with therapist or other participants as a team if necessary, or individually to complete tasks.

#### o Cognitive:

- **Knowledge** Able to reflect an understanding of the process, repeat them in a somewhat accurate order, and adjust for unexpected barriers.
- **Temporal organization** This task must be completed during daylight hours. Preferably in sunny, or not rainy, weather. The plants must be placed in the dirt quickly after being removed from the pot transported in.
- Organizing space and objects Recognize which tools are needed for which actions and be able to set them within reach for the time they will be needed.
- Adaptation May have to adjust for weather, natural barriers, or misunderstanding of the techniques necessary.
- Energy This activity could take anywhere from a few minutes to many hours depending on the number, and type, of plants being used.

# • Body Structures and Functions

- o Must be able to pay **attention** to the process and tools for efficiency and safety.
- o Needs to be able to use **memory** to follow directions and order of operations.
- Cardiovascular and respiratory functions are needed to facilitate basic body functions.
- Neuromusculoskeletal and movement functions are needed to allow lifting, bending, and manipulation of tools and materials.
- Voice and speech functions are used to communicate the procedure of operations and assess ways to overcome barriers.

## Physical Safety

Must be careful not to harm self with the shovels, rakes, or other tools used.
Exposure to sun is a concern for long-term activities. Heavy lifting may also be an issue for large plants or multiple small plants.