THAD Therapeutic Horticulture Activity Database

Activity: Nature Goal: Cognitive/Intellectual Populations: Children

TH Activity Plan – Pediatric Nature Station

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ACTIVITY DESCRIPTION: Children participate in hands-on plant and nature-based activities at a nature station within a hospital, working independently or with a parent under the direction of the HT students.

THERAPEUTIC GOALS:

Cognitive/Intellectual: Strengthen attention, perception, executive function cognitive skills

Physical: Develop fine motor skills

Psychological/Emotional: Expand self-agency & decision-making; develop social-emotional skills

Sensory: Build sensory tolerance for tactile handling of materials **Social:** Expand social & communication skills during session; share materials with others; work independently from adults to the degree appropriate

Materials

Paper, pencils, crayons, glue, scissors,

A variety of projects & related materials (see ideas below)

Wipes

STEP-BY-STEP PROCESS:

- 1. **Pre-Session Preparation:** Nature station is set up and staffed by volunteers or staff with experience in engaging with pediatric population. Assessing functioning skills (mental/physical or other) of participant or other health challenges at start of session is helpful.
- 2. Facilitator begins session by determining if participant(s) have allergies to any of the materials on table. Providing some verbal & visual cues, the facilitator allows the child to be creative, selecting materials, design & execution of nature project. This includes allowing the child to determine for themselves when they have completed project (or their attention wanes).
- Ideas for a nature station include making paper plants, pop-up cards, leaf rubbing cards, cut paper projects, sensory plant activities, monthly themed crowns, booklets, mosaic projects, puppets, and more.

APPLICATIONS FOR POPULATIONS: Having a nature station set up in a hospital setting can appeal to patients, family members and staff, offering a variety of nature activities. Typically structured as a drop-in format, with one activity per day, the station can be indoors or outdoors, preferably in a high traffic and visible area within the hospital. Nature stations can also be appropriate for other settings and can be drop-in or scheduled TH. In a pediatric hospital setting, participants may be patients, siblings, family members, visitors or staff. Selected TH activities should accommodate a range of skills (fine motor, hand function, cognitive/intellectual function, mobility, self-regulation), with assistance or cues provided by facilitator.

Child development involves mastering skills across health domains. This includes learning and practicing to be independent of adults/caregivers. The nature station can support this by providing a safe, secure session for children to explore their independence, decision-making, and reasoning abilities. Encouraging parents to allow child to work on their own without interruption or direction can be valuable for both parent and child. The program strives to provide low-cost activity models that parents may easily replicate at home.

SAFETY CONSIDERATIONS: Facilitators are responsible for knowing poisonous and toxic plants and plant parts. Allergies, sensitivities, mood dysfunction, or other health challenges that may impact participation are helpful to know where appropriate. This can include self-harm or tendencies to be aggressive towards others.

NOTES OR OTHER CONSIDERATIONS: Legacy Health has offered pediatric nature stations since 1997 and has pioneered this informal TH engagement model that has been replicated by hospital and other settings. Using its gardens and plant materials available in these has inspired and guided the type of nature activities used in this programming. Legacy Health Therapeutic Horticulture Garden Program plans it's year-round calendar of events and nature station activities by July to submit dates and program for the Child Life Program calendar for the next twelve months. These include:

August September October	Amazing Plants & Dog Days of Summer Fall Fun & Garden Critters Fall Fair	February March April	Hawaiian Days Luck O' the Irish Spring is Here! & Earth Day Celebration
November December January	Nature Crafts Let it Snow! & Our Winter Birds Winter Weather Wonders	May June July	Lady Bug Days Insect Investigations Butterfly Days & Garden Birthday Celebration

An important element of the nature stations is having Legacy interns plan, submit session plants, and conduct the stations using cognitive and communication strategies with children and their families, under the supervision of the HTR. Interns are required to conduct at least one station for each of the required templates including card, crown, mask, fan, pop-up card, bookmark, puppet stick, booklet, and life cycle stages chart. Students are encouraged to conduct each template session at least twice practicing it in another month/season of nature stimulation for pediatrics. Interns select appropriate templates for senior setting garden clubs and make necessary adjustments to replicate templates for senior programming.

REFERENCES/ RESOURCES:

Ardoin, NM., & Bowers, AW. (2020). <u>Early childhood environmental education: A systematic review of the research literature.</u> Review of the early childhood environmental education literature presents overwhelming strong evidence of positive child development and environmental outcomes. *Children & Nature Network.*

Johnstone, A., Martin, A., Cordovil, R. et al. (2022). <u>Nature-based early childhood education and children's social, emotional and cognitive development: A mixed-methods systematic review.</u> Nature-based early childhood education may support children's growth in multiple areas of social, emotional, and cognitive development. *Children & Nature Network.*

Jordan C, & Chawla, L. (2019, Apr). A coordinated research agenda for nature-based learning. Front Psychol., 10, 766.

Zamzow, J. & Ernst, J. (2020). <u>Supporting school readiness naturally: Exploring executive function growth in nature preschools.</u> The International Journal of Early Childhood Environmental Education, 7(2), 6-16.

Edits were made for THAD purposes in 2024.

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