

Go, Reflect, Observe, Wonder (GROW): Enhancing the Mind-Body Connection in Children Through Nature

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BACKGROUND

Literature

- Inadequate self-regulation skills result in **reduced engagement in childhood occupations** including social participation, social and emotional health, education, leisure, and play.¹
- Being immersed in nature has many effects on health and well-being.²⁻⁵
- There is a positive connection amongst nature, mindfulness, and self-regulation** for children and prosocial behaviors, attention, communication, and self-awareness.^{2,4,8,9,10}
- The **Inclusion of mindfulness-based interventions (MBIs) in the development of a curriculum can enhance self-regulation skills** for elementary-aged children, **leading to increased participation** in various occupations.^{3,4,8,9,10,11}

Support

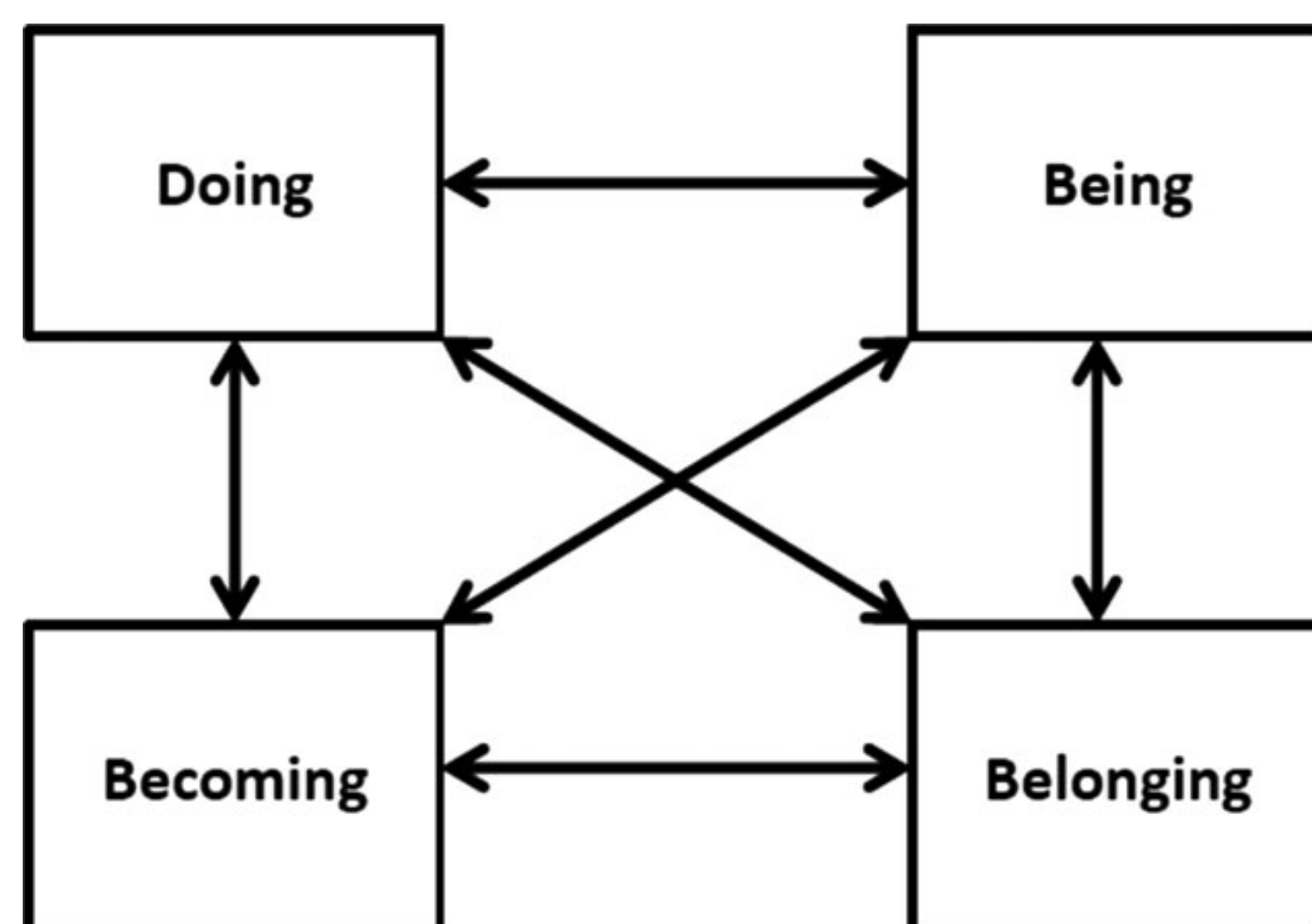
- Based on discussions with 13 nature-based, 12 include aspects of **mindfulness** within their camps, either formally or informally.

Gaps

- Let's Grow Outside camp, facilitated through Beyond Boundaries Therapy and Wellness, moved locations which impacted proximity to a space to host camp.
- Few to no MBIs** have been included in previous Let's Grow Outside camps.
- 11 practitioners were unaware of an existing nature-based mindfulness camp curriculum.**

(Anonymous, virtual interviews, September 3, 2025, to October 10, 2025)

FRAMEWORK



- The **Doing, Being, Becoming, and Belonging Framework** was used to keep the project occupation-centered.
- It provides a clear focus on how **engagement in occupations** (Doing) will contribute to **self-identity development** through creative and mindfulness activities (Being), lead to **increased self-regulation skills** (Becoming), and ultimately contributing to **enhanced connections amongst the group** (Belonging).^{6,7}

GOALS AND OBJECTIVES

Goal 1: Implement MBIs into Let's Grow Outside camp

Objectives
1. Introduce one MBI each week, provide handouts
2. Provide comprehensive resource guide to caregivers
3. Participants share their favorite MBI and group activity, 4/6 report a positive experience

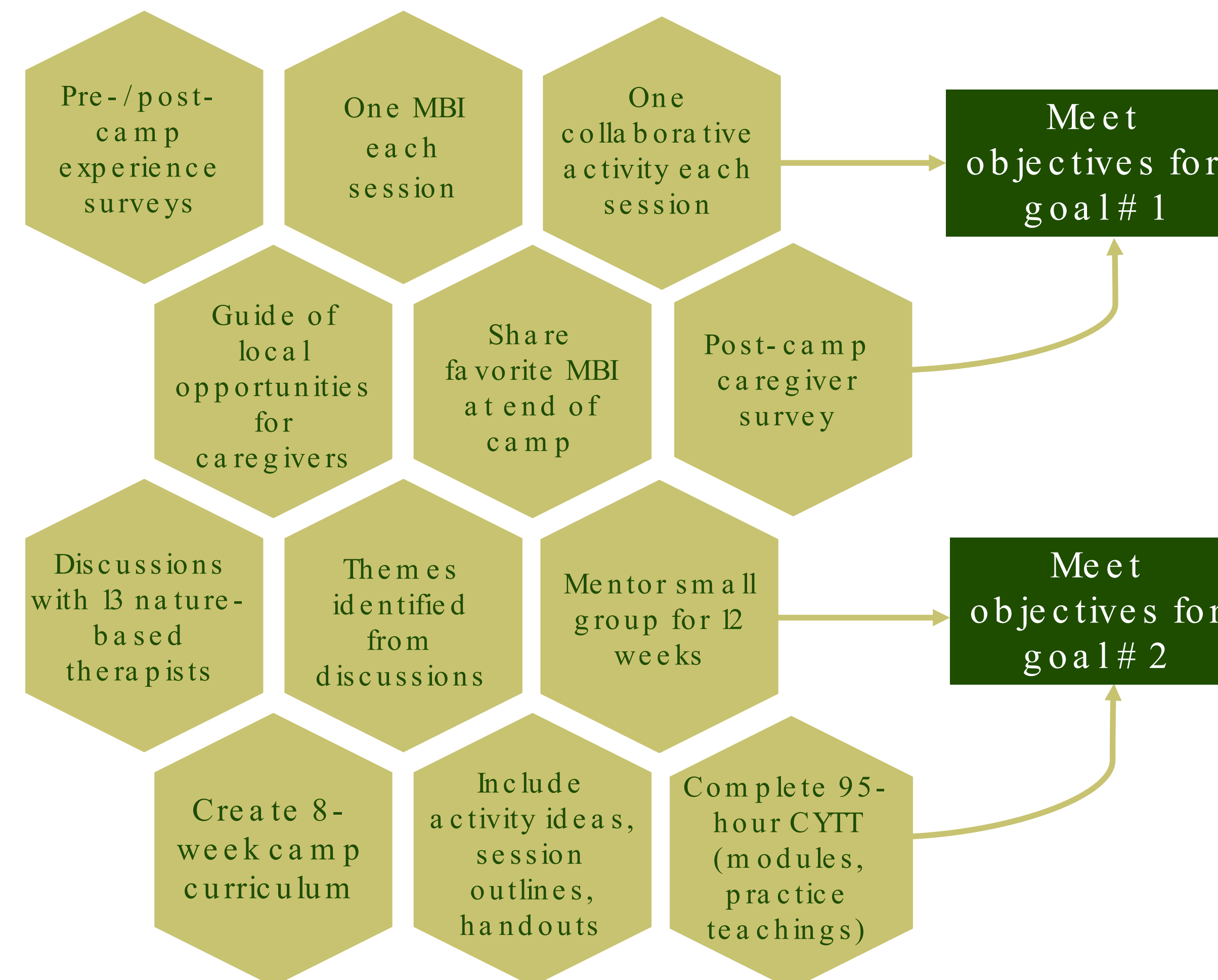
Individualized Learning Objectives

- Complete a 95-hour children's yoga teacher training (CYTT)
- Increased understanding regarding benefits of nature-based therapy impacts on self-regulation
- Insight into MBIs used at Beyond Boundaries Therapy and Wellness

Goal 2: Create a nature-based mindfulness camp curriculum for practitioners

Objectives
1. Explore current nature-based practices and MBIs
2. Identify supports and barriers related to implementation of MBIs in nature
3. Mentor for BIO Girls, a 12-week program focused on boosting self-esteem and well-being for young girls
4. Develop 8-week nature-based mindfulness camp curriculum
5. Refine curriculum through stakeholder feedback

ACTIVITIES



Go, Reflect, Observe, Wonder (GROW)

Enhancing the Mind-Body Connection in Children Through Nature

Madison (Madison Post, OTS)
Occupational Therapy Doctorate Capstone Project
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Scan to see the GROW curriculum



Yoga Jenga

Yoga Jenga is a fun and challenging game designed to increase strength, energy, focus, or relaxation. Incorporating yoga, this activity can help promote the mind-body connection in children.

Materials	Skill Focus	Time
• Jenga game (or blocks) • Small cups of water • Solid surface to place blocks • Tossing, steady or balance	• Body awareness • Breathing regulation • Focus/attention	• About 20 minutes



Directions

- 1. Split into a group to start game (one kiddo surface)
- 2. Gather in a circle, each person standing or sitting at their own spot
- 3. Place cups of water and group blocks through time, adding through rounds
- 4. Take turns removing one block at a time from the tower
- 5. Follow a yoga pose or block, or the pose as a group
- 6. Use blocks to support or hold as a group (optional), unless as you feel blocked
- 7. Continue taking turns until the tower falls
- 8. Release the tower, take 2-3 deep breaths as a group
- 9. Rebuild tower and start another round

Grade Up

- Focus on balance poses
- Continue poses into a flow
- Use cups of water and add challenges
- For an interactive experience (e.g., how do you feel when you are standing on one foot?)
- Breathing exercises throughout

Grade Down

- Focus on poses that do not require much balance
- Use small cups and add challenges
- Use simple directions
- Remove poses until 2-3 turns to decrease time waiting

Formative

- Observations regarding participant participation in MBIs and group activities
- Weekly check-ins with capstone mentor
- Check-ins as needed with content experts and faculty mentor

"This is truly amazing! You've done a great job with your curriculum... One piece of feedback is to look at adding a component of interoception-based visuals could pair well with your lessons." - OT

(Anonymous, email, November 19, 2025)

Summative

- Pre-/post-camp experience surveys
- Post-camp surveys completed by caregivers
- Feedback from draft of GROW curriculum

"Your program looks great and very supportive! Your visuals are diverse and simple to the eye. I would love a copy of this when all said and done if you're willing to share." - OT

(Anonymous, email, November 17, 2025)

FINDINGS

Survey Results

- Participant pre-/post-camp experience**
 - Group average increased in 3/4 categories
 - Attention, emotional regulation, and mindfulness
 - Social participation decreased
 - Participants expressed **interest in future camps**
 - "I would participate again"
 - "Always"
 - Favorite MBI activities**
 - Tooga and rollercoaster breath
 - Tools learned to help regulate self**
 - Deep breathing, thought bracelet, rainbow hike
- Caregiver perspective of camp experience**
 - Handouts were "very helpful"
 - Child expressed enjoyment in MBIs
 - Will recommend camp to others

Feedback

- 5 OTs, 1SLP, 2 content experts, capstone mentor, and caregivers provided feedback

"I feel very positive and enthusiastic about this curriculum, finding it highly usable and easily adaptable for my speech therapy groups, especially those working in nature!" - SLP

"Great program, excited to do in the future." - Caregiver

"This is INCREDIBLE. All of it is so well put together and it makes me so happy to see this! Thank you so much for sharing." - OT

CONCLUSIONS

Immediate outcomes

- Additional tools to use for self-regulation
- Support carryover across environments
- Increased practitioner understanding

Long-term outcomes

- Future use of MBIs in Let's Grow Outside camp
- Increased enrollment across community
- Wider adoption of GROW curriculum across the U.S.

Sustainability

- Physical copy provided to:
 - Capstone site and added to the Let's Grow Outside binder
- Virtual access provided to:
 - Nature-based practitioners
 - Content experts
 - Capstone site
 - Future opportunities that arise in relation to curriculum

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REFERENCES

Please scan the QR code to see the references and logic model.

