

TEND, GATHER & GROW TEACHER GUIDE

Tend, Gather and Grow is a curriculum dedicated to educating people about wild plants, local landscapes, and the rich cultural traditions that surround them. It is intended for K-12 teachers and community educators with a focus on serving Northwest Native and regional youth. Through discovering the wonders of plant life, youth build skills in food security, health, social/emotional intelligence, and land stewardship.



The *Tend* curriculum is adaptable to many K-12 and adult learning environments. Lessons can be taught in formal or informal education settings including public school classrooms, community workshops, camps, after school program, native plant garden programming, and home-school contexts. *Tend* lessons are intended to supplement regular curriculum, although it may fill educational requirements. Teachers can choose to weave plant-based learning into general studies in science, social studies, art, reading, math, home economics, and other content areas. Lessons can be taught individually based on a single topic or plant, or they can be offered in themed modules so students broaden knowledge and skills over time and with experience.

About the *Tend* Team: Our *Tend* team has worked together for the last two years, meeting on a monthly basis to explore plant knowledge, germinate lessons, and pilot activities in a variety of educational settings. We represent a diverse group of individuals bound together by our love for plants, empowered education and connecting youth with nature. Our core curriculum development group includes Elise Krohn, Elizabeth Campbell, Kim Gaffi, Annie Brule, Charlie Sittingbull, Joyce LeCompte, Mariana Harvey, and Charlene Koutchak. Additional team members who have generously contributed time and expertise to the project include Tamar Krames, Aleta Poste, Brett Ramey, Rose James, Janna Laffrey, and Valerie Segrest.

THE CURRICULUM

The *Tend* curriculum has thematic modules, each with multiple lessons including:

- [Tend, Gather and Grow Plant Guide](#) (20 regional plants, each with an overview and multiple lessons)
- [Wild Food Traditions](#) (seasonal foods, nutrition, and cooking)
- [Herbal Apothecary](#) (plant medicine)
- [Cultural Ecosystems](#) (indigenous land management practices)
- [Plant Technologies](#) (plant-based tools and structures)
- [Tree Communities](#) (plant knowledge and social emotional intelligence)

Additional teaching resources including:

- [Short teaching videos](#) featuring Salish storytellers, plant experts, and youth. Links are embedded in lessons and can be found at <https://vimeo.com/cedarboxstories>.
- [Educational materials](#) including games, posters, plant identification cards, and recipe cards

OVERARCHING CURRICULUM GOALS:

- *Increase regional awareness of traditional plants and encourage the development of a healing relationship with land, self, and community.*
- *Validate native ways of knowing including experiential learning and the transmission of knowledge through stories.*
- *Increase youth access to and consumption of nutritious wild plants.*
- *Develop sensory observation and storytelling skills and as a means for self-expression and social change.*
- *Cultivate a love for scientific inquiry and promote STEAM career pathways.*
- *Increase the number of community educators teaching about plants and local landscapes.*

NEXT GENERATION SCIENCE STANDARDS AND STEAM CONNECTIONS:

Each lesson is aligned with the Next Generation Science Standards (NGSS), Washington State's adopted science standards. NGSS is not a set curriculum, but three-dimensional performance expectations progressing from grade K-12, focusing on fewer core ideas, and more on application of science and engineering practices. Within each *Tend* lesson, the performance expectation, scientific and engineering practices, disciplinary core ideas, and crosscutting concepts are identified. Students apply STEAM (science, technology, engineering, arts, and mathematics) skills to build towards mastery of these performance expectations. *Tend* lessons are intended to supplement students' growth towards a performance expectation, and not as stand-alone assessment of student growth within a particular standard.

GUIDING PRINCIPLES

The following principles operate as throughlines - threads connecting all modules and lessons:

- Storytelling
- The Art of Noticing
- The 4 R's: Relevance, Relationship, Responsibility, and Rigor
- Culturally Responsive Teaching
- Honoring Cultural Property Rights
- You Don't Need to be an Expert
- Learn Together
- Teach and Learn Outside

Storytelling: The *Tend* curriculum includes plant stories with special focus on Coast Salish stories. Stories are a means of cultural knowledge transfer. They are a way to help us understand the world around us and the values and teachings of elders who have come before us. *(More in this section to come from Roger Fernandes)*

The Art of Noticing: In this digital age, fewer people get the time or opportunity to be in nature, simply noticing the wonders of life around them. It can be both healing and empowering to engage our senses and awakening to the rhythms of the seasons. The *Tend* curriculum invites educators and students to develop critical

thinking skills in observing, comparing, contrasting, classifying and identifying plant attributes. Attuning to seasonal changes also helps us to know *when* to find plants. *Tend* activities that encourage the art of noticing include visiting a sit spot, plant observation, writing, journaling, drawing and mindfulness activities. Teachers are encouraged to do activities outside with the plants, or bring plant samples in classroom so that students can *experience* the knowledge.

The 4 R's: When looking to create the most engaging and authentic learning environment for young people, we work to balance the 4 R's (McLaughlin et al in *Urban Sanctuaries* (1994)): Relevance, Relationships, Responsibility, and Rigor.

Relevance: *Are the offered activities or projects meaningful to young people and their communities? Why are we learning this content? How does this content relate to our immediate community? How does it relate to your own life?* Ways to weave more relevance into your project and/or teaching include:

- Teachers exploring and understanding the curriculum's relevance to their own lives.
- Exploring local issues around food access, nutrition, and tribal sovereignty. Students exploring their own food cultures.
- Seizing teachable moments by responding to the relevance of a single moment, when a passing butterfly or a recent news event creates an opportunity for related learning.

Relationships: *Is the learning environment creating a safe, inclusive space where young people can form strong bonds with their teacher and each other?* Ways to strengthen relationships include:

- Recognizing that students' ability to learn is strengthened if their basic needs for human connection and love are being met.
- Integrating time and activities that allow students to share with each other.
- Being willing to be vulnerable, transform yourself, be a learner, and share your journey.

Responsibility: *What are opportunities for youth to take on real-world projects and/or roles?* When integrating *Tend* into a school or classroom, consider what kinds of roles and responsibilities students can lead. Depending on age, students can lead check-in, gather needed supplies, evaluate the activity and give feedback. Working together and giving back to the community is a powerful tool for learning and empowering students. Larger group projects and responsibilities might include:

- Tending a wild food garden
- Teaching younger students
- Creating & selling value-added items to raise money for a meaningful cause
- Building and maintaining a wild food & medicine nature trail

Rigor: *Are students invited to engage in meaningful challenging work requiring dedication and sustained effort?* In the context of the *Tend* curriculum, rigor might look like going outside on a cold, rainy day, working hard to plant and maintain a garden, doing a community service project, making products for a fundraiser, or teaching younger students what they have learned.

Culturally Responsive Teaching

Culturally responsive teaching invites students and community members to share their ways of learning and knowing. When taking a culturally responsive stance, multiple perspectives within the learning community shape educator plans and decisions. Educators encourage learners to move from dependent passive receptors towards active meaning makers. In order to teach and learn in this way facilitators seek and utilize resources to:

- *incorporate local knowledge including Native American culture and language*
- *understand and uncover our own cultural perspectives and biases*
- *challenge dominant narratives and habits of silencing*
- *provide differentiated learning opportunities that meet the needs of diverse learners*
- *cultivate critical consciousness that empowers students to challenge the status quo*

Honor Cultural Property Rights

Among many Native People, there are certain subjects that are not spoken about in public. In Northwest Coastal Indian culture, knowledge is considered wealth. Harvest sites, recipes and spiritual uses may be a part of people's family heritage and are passed down through the immediate family or spiritual community. Speaking about these topics in public may give their power away, or it may be misused in the wrong hands. This is in contrast to dominant white culture that believes that everyone should have free access to knowledge. Giving people permission to share only what is appropriate and helping them to understand why knowledge is protected helps to create a safer learning environment.

You Don't Need to be an Expert

Be careful to not to try to possess the content you're teaching. If you come across as "the expert," or talk over students' heads, they may lose confidence. Instead, ask questions and add information based on their answers. Use their level of understanding as a foundation to build new knowledge.

Vulnerability

One of the most important, and perhaps neglected traits of teaching is vulnerability. Understandably, being in front of a class is already a lot of exposure and the thought of shedding more layers can be uncomfortable. However, if you're willing to be vulnerable at the times where your personal experience and feelings are already stirring up inside of you, then that's where magic happens. Students start to see you in a different light. Some students can now hear your teachings with new clarity and connection. Most importantly, your vulnerability lets students know that you're on this journey with them, and that their own courageous vulnerability will help them get the most out of the learning experience.

-Wade Arnold, GRuB Lead Educator



Learn Together

Many *Tend* lessons encourage teachers to break students into small groups. This encourages collaboration, promotes active learning and builds communication skills. It also promotes equity of students by encouraging them to work together. Each student has a voice. Breaking out into small groups may require more intentional guidance and structure for younger children. If possible, find a teaching assistant, parent, or volunteer who is willing to support you in supervising students so they stay on track.



Teach and Learn Outside

When we're learning about nature, it seems obvious that being in nature would be ideal. And yet, weather, accessibility, convention, and time are all reasons to put it off until next time. Connecting students to nature needs to be more than a mental exercise. Breathing fresh air, feeling rain on one's face, and hearing the sounds of the forest (even mixed with traffic) is just as valuable (if not more so) as learning the names of plants. Here are ideas to support your outdoor adventuring.

- Asking parents and PTA to provide rain gear so students are comfortable and can have a positive learning experience.
- Setting expectations and physical boundaries before you venture out. This might mean getting very specific about not going beyond a tree line or a sidewalk.
- Having outside time can be the default instead of the special occasion.
- Balancing structured outdoor activities with more freeform exploration. Sometimes the most powerful teaching moments happen when an unexpected plant or creature appears. Many youth get so little time outside that simply experiencing the freedom and expansiveness of outdoors can be healing and invigorating.
- Get dirty! Don't be afraid to tromp around in the mud and blaze new trails. Sometimes getting off the beaten path and exploring new terrain is the most memorable part of being outside. Encourage students to be safe, but balance that with adventure. People and plants are both resilient.

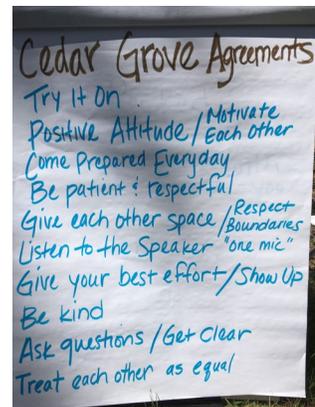
GRUB STYLE FACILITATION TOOLS

In our experience, there are more curricular resources that cover content (the what) than process (the how). When teachers and others come to GRuB to observe our program or attend a training, they often remark that something feels different, something that isn't immediately obvious or tangible. The difference is in the 'how' we connect with youth, not so much what we teach.

Community Guidelines

One ingredient to fostering a safe learning environment is creating a community contract where we spell out our expectations of each other. The extent of a community contract might be less for a day-long class vs. a year-long cohort. Areas to cover could include: personal safety, mutual respect, communication, relationships, and participation. Incorporating personal and group reflection time on the community guidelines will keep them relevant and useful. Examples of guidelines include:

- Try it On: This is an invitation to be open-minded to others' ideas, feelings, worldviews and ways of doing things so that greater exploration and understanding are possible. The invitation also includes feeling free to take things that "fit" and to leave or file away things that don't.
- Both/And Thinking: This type of thinking invites us to see that more than one reality or perspective can be true at the same time rather than seeing reality as strictly either/or, right or wrong, good or bad, this or that. Using "both/and thinking" can be very helpful in reconciling differences and conflicts that do not present easy solutions.
- Don't Yuck my Yum: invite students to hold their immediate negative impressions of any activity or taste to themselves so as not to taint the experience for everyone around them. Welcome more specific adjectives than "good" or "bad."
- Move Up/Move Up: If you are someone who doesn't usually engage in discussions, challenge yourself to "move up" and make an effort to share your perspective more than you currently do. If you are someone who usually contributes a lot in conversations, "move up" and practice your listening skills.



**These guidelines are part of VISIONS Eight (8) Guiding Principles for Successful Outcomes Across Cultural Differences. (For more information or for training in the VISIONS, Inc. Model of Multicultural Change, please contact VISIONS Inc., www.visions-inc.org.)*

Circles

As often as possible, we try to arrange learners in a circle formation where everyone can see every other person in the group. This arrangement allows the teacher to quickly scan the group and assess students' individual comfort level and energy as well as overall group dynamics. Circles also create more opportunity for inclusion and group synergy in learning. Requesting a real circle is one way to invite learners to be more fully present in the moment and to promote more group accountability.



Openings: Check Ins

We begin most gatherings with a circle and check-in. Check-ins are meant to be a pause before we dive into content. They are an opportunity for each student to bring their voice and energy into the circle. Check-ins ideally include a chance for students to name their mood in some way as well as to share something about themselves that helps the group deepen their connections. Check-in circles also mark the opening of our learning time together and bring some ritual and even sacredness to our shared time. Having students lead check-ins is a great opportunity for building leadership and public speaking skills.

Example Check-in questions

- *What is your superpower?*
- *If your mood was a weather system, what would it be?*
- *Who made it possible for you to be here today?*
- *If you could be any animal (or plant), what would you be and why?*
- *Rate your day/week from 1 to 10 and tell us why you chose that number?*
- *What is one thing you're looking forward to (or excited about learning) in class today?*
- *Have each student lead the group in a stretch while telling everyone how their body is feeling today.*
- *P.I.E.S. for longer, deeper check-ins - How are you doing Physically, Intellectually, Emotionally, Spiritually?*

Icebreakers

Studies show that people learn better and faster when they are playing and laughing. Play is one of the quickest ways to get folks to rip up their 'cool card' – the attitude of distance and inauthenticity we use to protect ourselves. Play can be challenging for grown-ups and kids who are feeling nervous, insecure, or stressed. Because of this, it is important that individuals have choices about how they engage in games and activities. At GRuB, we require that students participate in activities, and as the risk (physical, emotional) involved in the activity increases, the more options for participation we give. Options for participation may include actively observing and reporting observations, cheering from the sideline, listening only (for active talkers), and taking the role of timekeeper or vibe-checker.

Mix it Up!

People have short attention spans, and this is especially true for young learners. Tend lessons are staggered with active and passive learning to help students stay engaged. If you lose students' attention, try another type of activity like storytelling, art, a physical game or time for small group reflection.

Closings and Debriefs

Closings help mark the end of our learning time together. This is where we once again hear each voice, reflect on our learning, and honor the time we've spent together. Debriefs can be another powerful tool for closing a space. Ask the group to reflect and process what came up by asking guided questions. Try to get the group to reflect on (1) what happened, (2) why it was important or what the impact was, and (3) what the next steps are for the group (or individuals) based on what came up. Examples include:

- Rock, Stick, Leaf: Ask students to reflect on “what rocked about today, what’s going to stick with you, and what’s something you want to ‘leaf’ behind.” (Option: pass around an actual rock, stick, and leaf.)
- Gratitude and Regrets: Students can name something they appreciated about the day or about someone else (gratitude) and one thing they wish they had done differently (regret).
- Give Back: Ask each student to “teach” the guest teacher or presenter one thing they learned.
- Highlights: Go around the group and invite each person to share a highlight of the day or activity. These can be short, one word highlights, or you can do something longer and more open-ended.

OTHER FACILITATION TIPS

Utilize a Talking Piece

A talking piece is a tool that can be used to establish a physical representation of who has the group’s attention and is the person talking. There are many ways in which you can structure the use of it depending on the goals of the conversation you’re having.

- Don’t overuse, balance with more freeform sharing.
- Accountability - if there isn’t accountability with the talking piece, it will become meaningless overtime.
- Sometimes pass around and invite students to share when it comes to them or pass.
- Sometimes put in center of group and allow those who want to speak to grab it from center.

Utilize Beans

This tool regulates the frequency of each individual’s contributions. You can give each person two beans and each time they talk, the teacher takes a bean from the person who spoke. This is the physical representation of “moving up/moving up.” Once someone has used both their beans, they can’t speak again.

Getting Attention

Try agreeing on a clapping pattern or some other noise to let the group know that someone is trying to speak. Once one person claps or make the noise, then others in the group can echo that until the group’s attention is focused on the person trying to speak. For example, we may use the term, “one mic” for one microphone so that students do not talk over each other.

Another attention getting strategy is to say “If you can hear me.....” followed by an act. For example, say to the group “if you can hear me, touch your ear.... If you can hear me, stand on one foot.” Do this until you have the group’s attention. You can use the technique of saying it loudly to try to get everyone to hear you immediately, or you can keep your voice soft and wait as a ripple of silence extends from where you are.

Team-Building Resources

- Growing Together by Greg Gale. Wonderful resource outlining theory and tools for creating an empowering youth community.
- Silver Bullets: A Guide to Initiative Problems, Adventure Games and Trust Activities by Karl Rohnke. This has a lot of great team-building activities and light warm-up games as well.

- Journey Toward the Caring Classroom by Laurie S. Frank. This book offers information about some of the theory of team-building and behind the scenes structure and facilitation tips as well as some specific icebreakers and other activities.
- 4-H Youth Development Program, a part of WSU Extension- Offers training and resources for facilitating team-building activities. Learn more about this program at www.4h.wsu.edu
- Liberating Structures - Liberatingstructures.com