

# Haa Shuká Tundatáani: Plants of Southeast Alaska

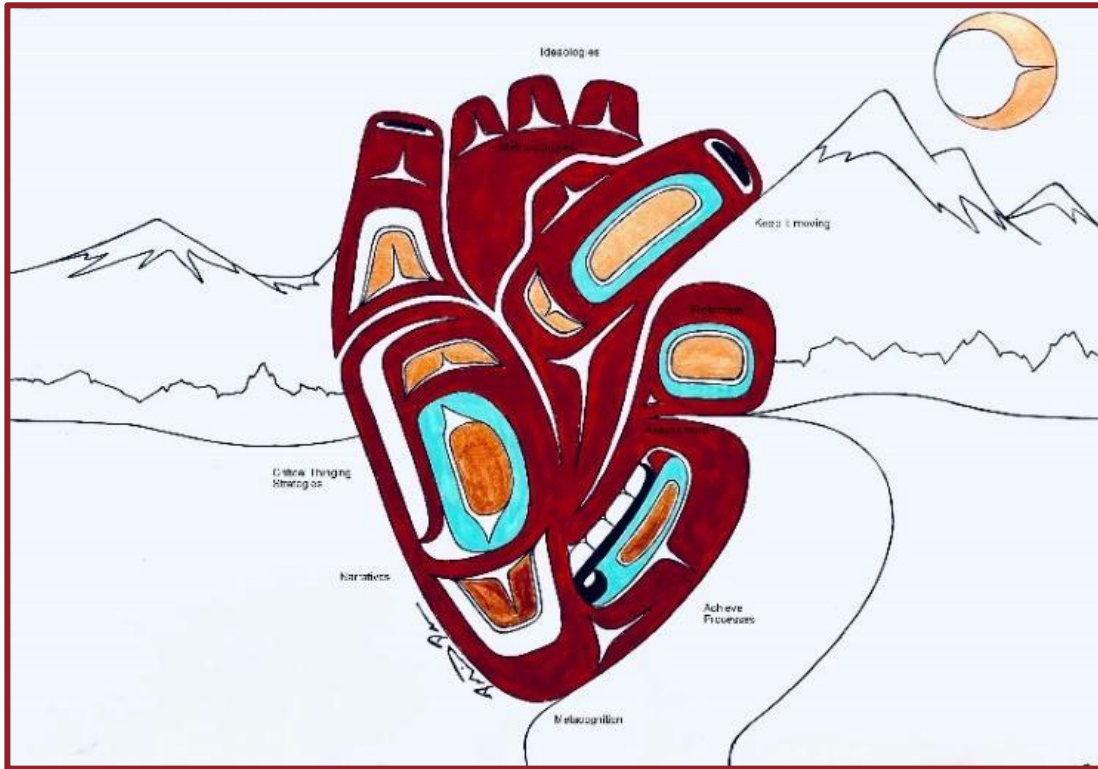


Figure 1: Design Attributions - Yanjeidí, Design by Delfine Decker, Goldbelt Heritage Foundation

## An Indigenous Framework for Learning

Haa Shuká Tundatáani represents a way of learning and understanding that connects us as people with the histories that have formed us, the knowledge we share today, and the world delivered by our future selves for future generations. This Indigenous framework seeks to heal.

This framework is designed around the heart at the center of existence, pumping what has existed before into what will exist in the future through the practice of listening, learning, and creation. This cycle of learning and belonging is in each of us and calls to be acknowledged and fostered by our surroundings and histories. Gunalchéesh, thank you to the Yanyeyidi whose story guides the visual representation and philosophy behind the heart of our learning framework and its existence rooted in landscapes.

| UNIT PLAN   |  |
|---|--|
| Ideologies  |  |
| <p><b>Unit Author &amp; Contact:</b><br/><i>[What is the unit author's name and contact email if available for support?]</i></p> <p>Kathleen Galau<br/>eowynsister@gmail.com</p>  | <p><b>Originating Source:</b><br/><i>[Where is this information coming from? How can acknowledgements and recognition be shown?]</i></p> |
| <p><b>Grade Range &amp; Subject:</b><br/><i>[What is your target audience?]</i></p> <p>Science<br/>9-12 grade</p>   | <p><b>Time and Timing:</b><br/><i>[What is the approximate time investment for this learning effort?]</i></p> <p>2 weeks</p>             |
| <p><b>Materials:</b><br/><i>[What materials and/or room arrangements are necessary for the scope and sequence of the unit?]</i></p> <ul style="list-style-type: none"> <li>• <b>Lesson 1:</b> Spinach, baking soda, light sources, straws or hole punches, clear cups, water, vernier oxygen and/or carbon dioxide probes, nalgene bottles, computer access, google slides.</li> <li>• <b>Lesson 2:</b> Have spinach, other plants, and everything else that the students can use in their experiment together in one place. I put everything in bins or trays with a label on the front. Then when we clean up everyone knows where things go and it makes it much easier. I try to put as many lab instruments and supplies in different labelled bins because it makes the lab set up and break down so much easier.</li> <li>• <b>Lesson 3:</b> Create and print out plant cards before class. Set out collection bags, clipboards, and note papers.</li> <li>• <b>Lesson 4:</b> Have a few copies of the Medicinal plants book for students that do not like using the computer. Make copies of the handout also.</li> <li>• <b>Lesson 5:</b> Materials needed to make salve: oil that is liquid at room temperature, beeswax, crock pots (1-5 depending on how much you want to make), knives, shea butter, pots. Labels, color pencils, markers, stickers, stamps, stamp pads.</li> <li>• <b>Lesson 6:</b> Print Labrador tea/fireweed honey pages. Have kettles or pots and hot plates to boil water, cups, spoons, tea, and honey. Create a shared google slideshow for students to create their group slide.</li> </ul> |  |

**Unit Title:**

**Subject / Course:**

**Grade Range:**

**Time:**

- **Lesson 7:** Have out any books that have been used in the unit, such as the medicinal plants and recipes books. Add other resources like a good seaweed book.

**Unit Name & Level of Integration Required:**

*[Indicate the title and the level of complexity required for successfully implementing this unit.]*

- L1 - this unit is off-the-shelf with materials that can be found in most classrooms or schools.
- L2 - this unit requires pre-planning such as gathering relevant materials, collaborating with GHF Indigenous educators, cultural bearers, and/or language speakers.
- L3 - this unit is best taught with a GHF Indigenous co-teacher due to the expertise, cultural knowledge, perspective, and/or language required for learning

**Haa Shuká Tundatáni:**

*[Provide a unit overview that describes how and why this curriculum engages prior knowledge and experience, is meaningful to the present, and builds skills, knowledge, and/or curiosity for the future. Where is the unit coming from and where is it going?]*

**Essential Questions:**

*[What are two compelling questions that will foster inquiry, understanding, and transfer the learning?]*

How are the plants in the Alaskan Coastal Rainforest useful in the lives and culture of the people of that region?

**Student Skill Sets & Understandings to Be Developed:**

*[What will students be able to do with this new knowledge and skills?]*

- create a salve of devils club for medicinal use.
- Find and prepare food from local plants in a traditional manner.

**Standards / Established Goals:**

*[Select the academic and cultural standards, both state and local, that will remain the focus.]*

**Methodologies**

**Methodologies**

*[Choose two teaching methods from the following that will be guiding your instruction.]*

- Oral narration
- Inquiry-based
- High-tech approach
- Kinesthetic learning (hands-on, tactile)
- Direct instruction

**Unit Title:**

**Subject / Course:**

**Grade Range:**

**Time:**

- **Project-based**
- **Cooperative learning**

**Cultural Engagement:**

*[Describe in what ways this curriculum connects students with and elevates Tlingit Aani (land) and/or Tundatáani (ways of knowing).]*

This unit is about plants found in the coastal rainforests of the Pacific Northwest and their traditional uses. Indigenous people of the region have studied these plants for thousands of years and their knowledge of them is vast and irreplaceable.

**Elder / Culture Bearer Role:**

*[Define elder / culture bearer involvement in the curriculum, ranging but not limited to, helping to author original content, gathering materials, presenting to students, etc.]*

Lesson 3: Bring in a Native Elder and/or Cultural Specialist that knows local plants and their uses. More than one is even better. Be sure to request them at least 3 weeks in advance. Talk to them beforehand and let them know what the activity is and what you want them to do. Discuss what plants to identify with the guests.  
Lesson 5: Need a culture bearer willing to help create devils's club salve.  
Lesson 6: Invite elders for a meal made by the students using Alaska plants.

**Integrated Media Element(s)/Resources:**

*[References, direct links, and/or attachments to related AV materials.]*

- [Medicinal Flora Alaska Natives.pdf](#)
- [Medicine lesson - Google Slides](#)
- [The Role of Traditional Medicine in Drug Discovery | OUPblog](#)
- [\(861\) Devil's Club: Tlingit Traditions of Helen Watkins - YouTube](#)

**Differentiation Strategies:**

*[In what ways will you differentiate this lesson for your variety of learners your classroom?]*

**Critical Thinking Strategies**

**Home Connections:**

*[How are students, families, and the community connecting from this learning effort? Are there opportunities for students to “teach or share” their new knowledge? Provide talking points for students to share with their families through discussion or activities. What do your students and their families value and how can you build on what they know and do outside of school?]*

**Unit Title:**

**Subject / Course:**

**Grade Range:**

**Time:**

Students will be creating a meal for elders in lesson 6. They will need to bring in local plants and some store items. This will encourage discussion of the curriculum.

### Unit Progression & Lesson Descriptions

[In 1-2 sentences, describe the scope and objective of each lesson. List any related performance tasks with each lesson.]

1. Where does all this biomass come from? Photosynthesis and chemical energy. Click [here](#) for lesson 1. Click [here](#) for the handouts.
2. Is the rate of photosynthesis constant? What can affect the rate? Click [here](#) for lesson 2.
3. How are we dependent on photosynthesis? Local plant life and their uses. Click [here](#) for lesson 3.
4. Plants as medicine: Traditional Tlingit medicines from local plants. Click [here](#) for lesson 4.
5. Creating devil's club salve: using a local medicinal plant. Click [here](#) for lesson 5.
6. Plants as food: Creating a menu from local plants. Click [here](#) for lesson 6
7. What plant do you value and why? Choice individual activity. Click [here](#) for the Performance task. [Alaska Coastal Rainforest Plants: Identification and Use Example Tea.pdf](#)

### Tlingit Phrases:

[What Tlingit phrase captures and embodies the new, desired knowledge or skill?]

- *Kaa wudujeeyí ka kaa x'éix dus.aaxí ch'áagu haa shagóonx'ich kusteeyí: Discipline and Obedience to the Traditions of our Ancestors (Discipline and obedience to the traditions of our ancestors)*
- *Sh yáa ayakdané ka ldakát káa yáa at uwanéi: Respect for Self, Elders and Others (Self-respect and respect for everyone)*
- *Ldakát át a yáa ayaduwanéi: Respect for Nature and Property (All things are respected)*
- *Tlél kútx i yáa wdawóodlik: Patience (Have patience [don't be in a hurry])*
- *Toowú klagé haa t'aakx'í, ka haa naax sateeyí, ka haa kusteeyí: Pride in Family, Clan and Traditions is found in Love, Loyalty and Generosity (Pride in our family and our clan and our traditions)*
- *Wooch eenx haa isteeyí, wooch dusxáni, wooch éet wutudasheeyí (When we're together, we love each other, we help each other)*
- *Yee toowú klatseen: Be Strong in Mind, Body and Spirit (Be strong)*
- *Lishoogú át kanaylaneek: Humor (Tell funny stories)*
- *Dikéex' wooch gayilsháat: Hold Each Other Up (Hold each other up)*
- *K'idéin at sa.áx ka a yáa awuné wáa sá i daa yadukaayí: Listen Well and with Respect (Listen well and respect what people say to you)*
- *Tula.aan tin yóo x'adutaan: Speak with Care (People speak with care)*
- *A káx yan aydél wé tl'átgi: We are Stewards of the Air, Land and Sea (Take care of the land)*

Unit Title:

Subject / Course:

Grade Range:

Time:

- *Yáa at wuné haa Aan Káawu jeeyís: Reverence for Our Creator (Reverence for our creator)*
- *Wóoch een kayéix yáx nagatee: Live in Peace and Harmony (Let there be peace and harmony among each other)*
- *Yee gu.aa yáx x'wán: Be Strong and Have Courage (Have courage)*

**Pinnacle Vocabulary:**

*[Choose up to three Tlingit and English vocabulary terms that will be emphasized throughout the unit.]*

Sauthkt- devils club

Callcayaan- alder

photosynthesis

**Check for Understanding**

**Culminating Community Building Activity Project:**

*[Outline the ways in which students might demonstrate their new understanding and/or skills at the end of the unit. How will you make this a community-based task?]*

- Students will make devil's club salve to be gifted to Elders in the community.
- Students will provide a meal for their Elders from local plants.
- Students will create a way to share information about five Alaskan plants

**Formative Evaluation:**

*[In what ways will you help students identify their strengths and weaknesses and how will you recognize areas students may need additional support?]*

**Summative Evaluation:**

*[Describe by what criteria will student demonstration of new knowledge or skills be measured.]*

**Reflections**

**Student Self-Reflection:**

*[In what ways will there be space created for student voice and reflection opportunities?]*

There are two significant assignments that allow student voice. They must chose a Tlingit dish to create and serve to Elders and the performance task in which they chose particular plants that they determine are the most useful.

**Unit Title:**

**Subject / Course:**

**Grade Range:**

**Time:**



**Educator Notes & Reflections:**

*[What additional background information would be helpful for an educator to deliver this unit? Any comments, questions, or suggestions regarding the unit.]*

This unit is best in the fall or spring so there are plants available. This unit has several opportunities for culture bearers. Be sure to schedule them and speak to them weeks before the unit begins.

**Acknowledgements:**

*[Please use this space for any further acknowledgements or references.]*

Gunalcheesh to the Alaska Native Heritage Program and Ann Garabaldi for the access to Medicinal Flora of the Alaska Natives. Amazing resources.

Gunalcheesh to the Isturis family for introducing me to many Native Alaskan foods and sharing how they are prepared. Thanks Ramone!

**Unit Title:**

**Subject / Course:**

**Grade Range:**

**Time:**