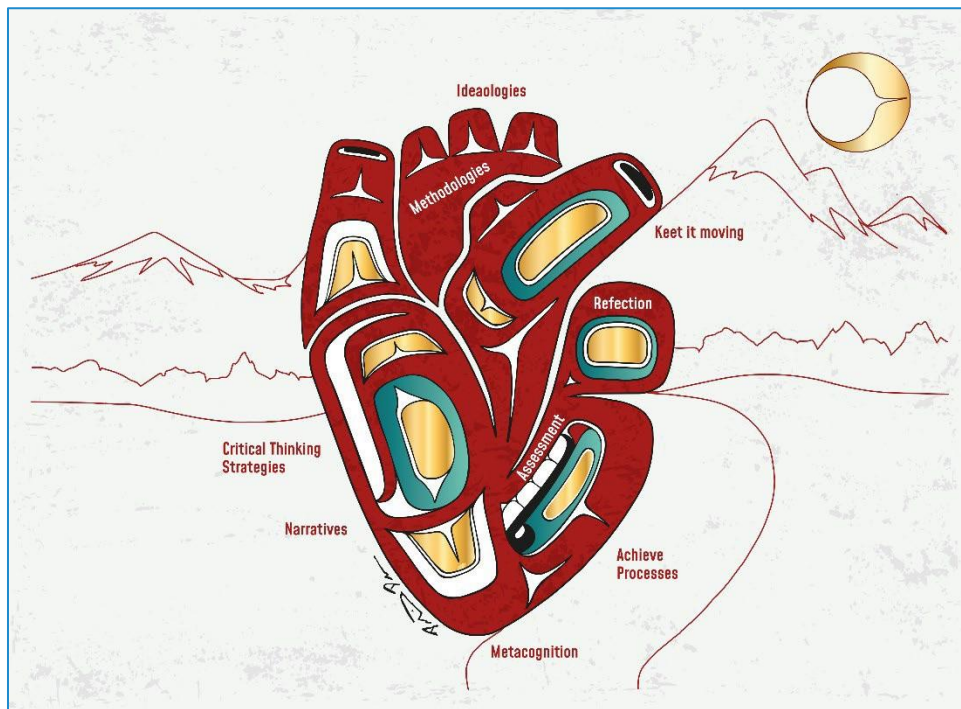


Haa Shuká Tundatáani: Yan Kawdudzinugu Át. *That Which Has Been Proven*



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>Haa Shuká Tundatáani: <i>[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?]</i></p> <p>This lesson series reflects the observational, qualitatively based scientific process used in traditional science practice. The unit engages students in considering their prior knowledge about trees, how they get and give nutrients, and ways people traditionally used tree resources in Southeast Alaska. This is meaningful because trees are an integral part of the economic growth in this region, and they are a renewable resource. They are also vital in carbon storage. This unit centers on the Tree People oratory, credited to Clarence Jackson, recorded by David Katzeek.</p>	
<p>Unit Name & Level of Integration Required: <i>[Indicate the title and the level of complexity required for successfully implementing this particular unit.]</i></p> <ul style="list-style-type: none"> • 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. <p>Unit Name: Yankawdudzinoogú At - That Which Can Be Proven Through Testing <i>L3 - this unit is best taught with a GHF Indigneous co-teacher due to the expertise, cultural knowledge, perspective, and/or language required for learning.</i></p>	
<p>Unit Author & Contact: <i>[What is the unit author's name and contact email if available for support?]</i></p> <p>Paul Marks, David Katzeek, and Brita Steinberger brita.steinberger@goldbelt.com</p>	<p>Originating Source : <i>[Where is this information coming from? How can acknowledgements and recognition be shown?]</i></p> <p>The oratory version told is credited to Clarence Jackson, and it is interpreted by Kingeisti', David Katzeek and Kinkawdunook, Paul Marks.</p>
<p>Grade Range & Subject: <i>[What is your target audience?]</i></p> <p>The target audience is middle school, and it is</p>	<p>Time and Timing: <i>[What is the approximate time investment for this learning effort?]</i></p>



<p>earth science-based.</p>	<p>There are ten individual lessons in this unit, 17 1-hr class periods and a field trip (3-4 hours). <i>Elements can be taught individually after the oratory presentation if it needs to be shortened and some extensions are included.</i></p>
<p>Materials: <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"> - The template and individual lesson plan lists. - Attachments printed out - Neutral colored felt - dye for felt - individual baking foil tins (9"x9") for felting - clear, unscented dish soap - bubble wrap - Cornell Notes sheets - Internet access - Colored pencils - Writing implements 	
<p>Essential Questions: <i>[What are two compelling questions that will foster inquiry, understanding, and transfer the learning?]</i></p> <ul style="list-style-type: none"> • <i>How does the Tree People oratory connect to Western earth science concepts?</i> • <i>How do trees communicate with each other?</i> • <i>How is tree communication reflective of balance?</i> 	
<p>Student Skill Sets & Understandings to Be Developed: <i>[What will students be able to do with this new knowledge and skills?]</i></p> <ol style="list-style-type: none"> 1. Describe the power of relationship and connection with nature. 2. Explain the difference between chemical and physical communication. 3. Construct a means of explaining a complex scientific concept through documentation of observations. 4. Identify elements of oratory that connect to a scientific concept or concepts. 5. Depict balance using visual and auditory means. 	
<p>Standards / Established Goals: <i>[Select the academic and <u>cultural</u> standards, both state and local, that will remain the focus.]</i></p>	

Unit Title:

Subject / Course:

Grade Range:

Time:

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
- 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).]

1. Students interact with an Elder presenting a traditional oratory connected to the unit concepts.
2. Students connect place to content and concepts using traditional learning methodology.

Students integrate Western science concepts with Tlingit traditional ways of knowing. They use Tlingit terms to address cultural values as they apply to the lessons.

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.]

1. Elder participates in lesson planning.
2. Elder presents oratory and responds to inquiry from students when finished with oratory.
3. Elder assists students while they complete related projects.
4. Elder provides input on grading.

Integrated Media Element(s):

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

Aas Khwáan - Tree People

<https://static1.squarespace.co...>

Tree Diagram Maker

<https://www.smartdraw.com/soft...>

[Graphic Organizer- Four corners posts](#)

[Tool for working with elders in the 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?]

Lesson One, Four, and Ten have Home Connection Questions or Tasks to discuss at home and follow up at school the next day. In this series, it is recommended that incentive outside of the grading system be used to encourage Home Connection activity follow-through.

Lesson One Home Connection Questions: How is balance reflected in our lives at home? What do we do on purpose to maintain balance? What are some ways the environment controls that balance? Why is balance important?

Lesson Four: Students take their tree diagrams home, and they add an element with their parent or family member.

Lesson Ten Connection Questions: Student interviews at least three people from home or the community and documents their responses to the following questions: 1.) Do you think trees communicate with each other? 2.) How do trees communicate with each other or other species in their environment? 3.) What are some of the benefits of SE Alaskan trees? 4.) How do trees impact the balance between people, animals, the environment and time?

Unit Progression & Lesson Descriptions

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

Lesson One:

- Initial conversation is about the connection between people and the Earth.
- Talk as a whole group about balance in life.
- Show picture of the tree line on a mountain in winter and in summer. **Consider what may cause the tree line.**

Review the following Tlingit Values:

- Haa Aaní (Our Land),
- Haa Shuká (Our Past, Present, Future),
- Haa Latseen (Our Strength, Leadership), and
- Wooch Yax̄ (Balance, Reciprocity and Respect).

Students should depict one of the values pictorially in relation to a three line and provide a three-sentence explanation of their illustration.

(1 Class Period)

Lesson Two:

Introductory Activity: Gradual Release on the Home Connection Questions. Students gathered information at home, they talk it over with a partner, and then the partners present their information to the class as a team.

Brief review of Four Corner Post educational structure model using the protocol graphic.

*Students participate in oratory presentation using the **Four Corner Posts Model of Learning***

1. Students listen silently while taking Cornell Notes using the template provided in this document.
2. Students discuss their notes with their partner after the oratory and develop two comments and a question for the orator.
3. Students participate in a structured discussion with the orator about the presentation. Responses are added to the notes.

Students complete a *what I thought before* and *what I know now* thinking routine and submit for grading.

One class period

[Lesson #3](#)

Students work in groups of 3-4 to construct and present posters about the oratory presentation. Rubric for evaluation is included in this document.

Two class periods

[Lesson #4](#)

Students construct a diagram of connections between the oratory presentation, the community, individuals, families, and nature. It is a whole class project and students interact with the Elder to complete the project.

Ticket out the door is the completion of a list of connections (individually).

Home Connection Task: Students take their diagrams home and parents initial that their student(s) discussed them with them.

One class period

[Lesson #5](#)

Whole group conversation about connections in the community, in family, with friends.

Students complete a **tree diagram** connecting what their roots are, what makes their bark strong, where their branches are reaching to, and who they share energy and sustenance with.

- One class Period

[Lesson #6](#)

Internet Research- Using the clan house writing structure, students will construct a five paragraph essay, based on Internet research and including APA citation. The APA citation site is:

<https://www.citationmachine.net>

Written response: *Can anything living be an island unto itself?* Provide evidence to support your response from the oratory and from Internet research (cite sources). Written response is 5 paragraphs to persuade a reader of your position on can anything alive be an island unto itself. *Each student must ask the Elder at least two questions to support their positions.*

This is a three day project- one day for research, one day to draft the essay and ask follow-up questions, and one day to revise.

Lesson # 7

Choral Reading

- Do Trees Talk to Each Other? by Richard Grant
 - <https://www.smithsonianmag.com>
- Hidden Under Your Feet is an Information Superhighway that Allows Plants to Communicate and Help Each Other Out. It's Made of Fungi. by Nic Fleming
 - <https://cafenamaste.com/scienc>
- Exploring the Underground Network of Trees- The Nervous System of the Forest by Valentina Lagomarsino
 - <https://sitn.hms.harvard.edu/f>

Class is divided into three groups, and each group collectively annotates their article.

Each group constructs a three slide presentation (summary, connections, questions for the group)

Students take notes on presentations and provide

Class is divided into three groups, and each group collectively annotates their article.

Each group constructs a three slide presentation (summary, connections, questions for the group)

Students take notes on presentations and provide feedback using the attached rubric: [Group Poster](#)

[Presentation Rubric.pdf](#)

- 3 Class Periods

Lesson #8

Field Exploration

Students go to the glacier and take pictures using I Pads or their cell phones to construct a landscape depicting balance and communication in nature.

Students draw rough but colored sketches of their scenes after participating in a class discussion on perspective, relative size, and distance.

Field trip plus 2 class periods

Lesson #9

Students lay out their felt, paint, soap, and roll it. Students hang felted landscapes to dry overnight.

Students participate in a gallery walk, exploring the felted projects.

They complete a short written thinking routine: [Find, Capture, Explain, Wonder](#)

2 class periods

Lesson #10



Students construct a letter to the teaching Elder, thanking them for teaching them and describing what they learned and how they will use it.

Home Connection Task: Students collect responses to the following questions from a parent, sibling, or guardian:

- What do trees do to communicate with us?
- What are some of the benefits we get from our relationship with trees?

Students will discuss the family responses in a critical conversation in small groups.

One class Period

Developing Critical Thinkers:

[Choose two of the main strategies and provide details as to how those two strategies will be incorporated throughout the unit.]

- Questioning
- Student-led discussions
- Inquiry-based learning
- Collaboration
- Problem-based learning
- Embodied Observation
- Internal Bias Assessment

Developing Critical Thinkers:

Students will complete a self- assessment (Attachment H) at the conclusion of the assignment.

[Choose two of the main strategies and provide details as to how those two strategies will be incorporated throughout the unit.]

- *Student-led discussions- Students analyze presentations and construct questions to drive research and further discussion.*
- *Collaboration: Students collaborate with the Elder and their classmates to investigate tree communication methods and how they are observed in nature. They work with partners and small groups to complete assignments and participate in whole group discussions.*

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)*
- *Yáa at wuné haa Aan Káawu jeeeyís: 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.]

- Symbiotic relationship- ***nas'k'i da héen aadéi woocheenxh sateeyi yé.***
- Dynamic System- ***héen kanadaayí at toonaxh***
- Mycorrhizal Networks – ***aadéi ya aan táyeex' at, woocheen yei has júneyee yé***

Translations provided by David Katzeek

Check for Understanding

Unit Title:

Subject / Course:

Grade Range:

Time:

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 participate in small group conversations about the Home Activity (tree communication questions). Each small group will be given a sapling to plant, and they will decide where to plant it and why.

Students will construct a "door to the classroom" as a whole group, with each student designing a 4"x6" tree with "next steps" listed and illustrated. "Next steps" are descriptions of what students will do with the information they learned in the unit. They will minimally answer the following questions:

1. *How can we strengthen our relationship with the trees?*
2. *Where will you plant your tree and why?*
3. *What will you do to share your knowledge with others?*

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?]

Students will complete thinking routines to assess their learning and opinions about the subject. They will make decisions based upon their interest and understanding of the topics.

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.]

Four Corner Posts of Education tool

Built-in planning time to construct lessons with teaching Elders

Acknowledgements:

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

Oratory Credit to Clarence Jackson;

Content Contribution Acknowledgement to Kingeisti', David Katzeek and Kinkawduneeq, Paul Marks.

