

'Ewa 'Āina Education Initiative

Unit Plan: Ka Waiwai o Pu'uloa (Link:

<https://drive.google.com/file/d/12-qxH1Uqgjo7W1PY3j5kzcu0out6NnQh/view?usp=sharing>)

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'Ewa 'Āina Site: Loko Pā'aiau

Detailed Lesson-Project Plan #2

Descriptive Lesson Title: Nā Loko I'a o Pu'uloa

Essential Unit Questions Addressed:

He aha ka waiwai o Pu'uloa? (What is the value of Pu'uloa?)

Educational Standards that the lesson will help students achieve

2.RI.1 - Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

2.RI.4 - Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.

HĀ framework and/or Hawaiian Culture integrated into this lesson

HĀ framework is integrated into this lesson through content provided and student reflection. This lesson connects students to Pu'uloa, 'Ewa and builds a foundation of **belonging** while building an awareness for the special place and resources that make up **Hawai'i**. The **responsibility** of students to Pu'uloa will be nurtured.

Materials needed

Videos, Media, Lesson Presentations/Resources - Digital Media and Resources

- [Ka Waiwai o Pu'uloa: bilingual digital book](#)
 - Link: <https://drive.google.com/file/d/1Oe0-we2O5lzmQ9YYu1E26tXyovtkQdBT/view?usp=sharing>
- [Loko I'a: Kumukahi.org](#)
 - Link: http://www.kumukahi.org/units/ka_honua/onaepuni/loko_ia

Student Assessments and Worksheets

- [E Helu Kākou!](#) (worksheet)
 - Link: https://drive.google.com/file/d/1n32RgNbcGvix1Z0P-E-aD_PTnfnjNpcD1/view?usp=sharing
- [Nā Hana Aloha 'Āina](#) (graphic organizer)
 - Link: https://drive.google.com/file/d/19xrvigvM9R0eE5WAJbWcgmA_92KZGddU/view?usp=sharing
- [O'ahu Map](#) (from previous lesson)
 - Link: <https://drive.google.com/file/d/10ZRnKuH3DGOZmZJ1ch5yN4fRCQN8q1sE/view?usp=sharing>

Supplies

- Learning Target & Success Criteria (for posting)
- Chart Paper to display exit ticket question
- Crayons/colored pencils

Lesson Introduction

- 1) Review Learning Target & Success Criteria for unit:
 - a) Learning Target: We are learning to care for the valuable natural resources of Pu'uloa harbor.
 - b) Success Criteria:
 - i) I can explain the value of fishponds in Pu'uloa.
 - ii) I can help restore Loko Pā'aiau.
 - iii) I can identify problems and obstacles at Loko Pā'aiau.
 - iv) I can design a tool to help take care of Loko Pā'aiau.
- 2) **Imagine:** Have students close their eyes and imagine the following:
Sample script: "Imagine all the stores shut down permanently. Our electricity has gone out and we have no refrigerators, and there is no ice for coolers. What could we possibly do to feed our families and communities? Raise your hand if you think we could survive. Now, open your eyes."
- 3) **Discuss:** Facilitate a short discussion with students about their thoughts and concerns over the imagined situation. (This should be a short discussion, 5 min max)
- 4) **Connect:** Explain that Hawaiians did not see the imagined situation as a problem because they developed a way to feed the population using Loko I'a. Show the following video on Loko I'a from Kumukahi.org (6:16): [Loko I'a: Kumukahi.org](https://www.kumukahi.org/loko-ia).

Instructional Sequence

Teacher Does	Students Do
<p>Project Ka Waiwai o Pu'uloa: Digital Book book on presentation screen or provide access for students via computer.</p> <p>Review vocabulary words (associated teacher-created hand motions recommended).</p> <p>Read section 2 of digital book in Hawaiian or English: Ka Waiwai o Pu'uloa, Nā Loko I'a o Pu'uloa.</p>	<p>Students will listen and read along, or take turns reading (at the discretion of the teacher).</p>
<p>On page 2 of <i>Nā Loko I'a o Pu'uloa</i>, there is a map of Pu'uloa that color codes the loko i'a present. Red spots are loko i'a that existed in the past, but were destroyed for various reasons. Blue spots are loko i'a that remain intact or are being restored today.</p> <p>Use the E Helu Kākou! worksheet and the map in the digital book to count the number of fishponds currently in Pu'uloa and the number of fishponds that existed before western contact. Compare the</p>	<p>Students will use addition and subtraction to complete inventory of fishponds in Pu'uloa in the E Helu Kākou! worksheet.</p> <p>Share observations.</p>

<p>number of fishponds remaining with the number destroyed.</p> <p>Emphasize the importance of restoring fishponds (food independence, avoid starving if imports are stalled, maintain a healthy ecosystem, cultural identity).</p>	
<p>Read section 3 of digital book in Hawaiian or English: Ka Waiwai o Pu'uloa, <i>Loko Pā'aiau</i>.</p>	<p>Students will listen and read along, or take turns reading (at the discretion of the teacher).</p>
<p>Return to the Map of O'ahu (each student should have their map with 'Ewa colored in yellow, and drawing of valuable resources from the previous lesson). Redistribute as needed.</p>	<p>Color the ahupua'a of Kalauao with blue.</p>
<p>Read section page 3 of <i>Loko Pā'aiau</i> in digital book Ka Waiwai o Pu'uloa. (<i>This is the page about restoring Loko Pā'aiau</i>)</p>	<p>Students will listen and read along, or take turns reading (at the discretion of the teacher).</p>
<p>Formative assessment: Guide students in finding different acts of restoration using the text. Have students record actions on the worksheet Nā Hana Aloha 'Āina. This worksheet will also be used after Loko Pā'aiau. Give students multiple pages if needed.</p>	<p>Students will record different restoration efforts, based on their reading.</p>

Closure

- Review Learning Target & Success Criteria for unit:

Learning Target: We are learning to care for the valuable natural resources of Pu'uloa harbor.

Success Criteria:

I can explain the value of fishponds in Pu'uloa.

I can help restore Loko Pā'aiau.

I can identify problems and obstacles at Loko Pā'aiau.

I can design a tool to help take care of Loko Pā'aiau.

- If the field trip is scheduled for the following day, preview packing list and agenda for the upcoming field trip.
- Exit ticket: (formative assessment)

Post the following question on a chart paper:

Ko'iko'i nā loko i'a. No ke aha mai?

Why are loko i'a so important in Hawai'i?

Accommodations for at least 3 types of diverse learners

Struggling readers and writers: If a student is a struggling reader, please accommodate by previewing the reading and vocabulary with them beforehand, or partnering them with a peer who is able to read with the student. If a student is a struggling writer, allow students to incorporate drawing and labeling on their post-it response.

Kinesthetic learners: Add simple hand motions for new vocabulary, especially Hawaiian vocabulary. This will

benefit all learners.

Distance learners: Jamboards can be used in place of post-its. Any worksheet can also be placed onto a jamboard or onto a google slide for students to write or type over. Breakout rooms can be used to facilitate small group discussions. For excelling readers, readings can be done asynchronously, then reviewed with a teacher.

Suggested Formative Assessment Method/s For This Lesson

- Completed Graphic organizer: Nā Hana Aloha 'Āina. Are students able to identify actions of aloha 'āina (in this case, actions that help to restore Loko Pā'aiau)?
- Exit ticket: exit ticket question addresses Success Criteria #1.

Explain How This Lesson Relates To the Unit Summative Assessment

This lesson introduces the basic concept and history of fishponds in Hawai'i and in Pu'uloa. This lesson also previews restoration efforts that students may experience at the fishpond site, Loko Pā'aiau. Creating awareness of various restoration efforts will shape the lens through which students will view the activities on the field trip, while creating a bank of student-created resources they can use when designing and building their tool (end product).