1. What is our purpose? **To inquire into the following:** • **transdisciplinary theme** Sharing the planet- An inquiry into rights and responsibilities in the struggle to share finite resources with other people and other living things; communities and the relationships within and between them; access to equal opportunities; peace and conflict resolution. • **central idea** Living things are dependent on each other.	Class/grade: Kindergarten Age group: 5-6 years old School: Poe Elementary School code: 49497 Title: We're all in this together Teacher(s): Antonia Adams, Kathy Blake, Alicia Carranza, Morgan Ray, Tere Robinson, Wendy Ulrich Date: April – May/June Proposed duration: 70 hours over number of weeks: 6

1b) Summative assessment task(s):

What are the possible ways of assessing students' understanding of the central idea? What evidence, including student-initiated actions, will we look for?

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Students will write and illustrate a scene that depicts how two or more groups of living things depend on each other. Students will also complete a self-reflection of their learning.

2. What do we want to learn?

What are the key concepts (form, function, causation, change, connection, perspective,

responsibility, reflection) to be emphasized within this inquiry?

Key Concepts: Connection, Function, Causation

Related Concepts: Interdependence, Goods and Services, Cooperation

What lines of inquiry will define the scope of the inquiry into the central idea?

- The way people depend on each other and other living things
- Ways that living things can help or hurt each other.
- The importance of recycling
- Characteristics of plants, animals, and insects.

What teacher questions/provocations will drive these inquiries?

- What are the needs of living things?
- How do we know if something is living?
- What is a renewable and nonrenewable resource?
- Why is it important to recycle?
- What can we recycle?
- How do animals adapt to the habitat?

3. How might we know what we have learned?
This column should be used in conjunction with "How best might we learn?"

What are the possible ways of assessing students' prior knowledge and skills? What

evidence will we look for?

Teachers will collect evidence of prior knowledge with what the students already know and understand about how living things are dependent on each other using a KWL chart. This will take place in whole-group. Small groups may stimulate further discussion.

What are the possible ways of assessing student learning in the context of the lines of

inquiry? What evidence will we look for?

Teachers observe and document student's interaction showing evidence or growth:

- We will learn the characteristics of living things.
- As a whole group, we will sort pictures into living and non-living categories.
- We will create an insect habitat by using a shoe box.
- We will sort pictures into land formations and water formations.
- Students will write a description about the object they created from recyclable goods.
- Students will write sentences to show how they can recycle household objects.
- Using interactive writing, students will illustrate and write about the lifecycle of a butterfly.
- Students will learn about food webs to demonstrate interdependency among living things.

4. How best might we learn?

What are the learning experiences suggested by the teacher and/or students to encourage

the students to engage with the inquiries and address the driving questions?

Teacher-initiated experiences

Teacher will bring caterpillars for students to observe their lifecycle and will create a class KWL chart to determine previous knowledge.
Teacher will take students out to butterfly garden to look for various life stages and will discuss how the flowers and butterflies depend on one another for survival.
Teacher will use a stimulus - i.e. photos, books, and videos, to promote discussion about prior knowledge of how different life forms depend on one another.
Teacher will take students on a scavenger hunt around the outside of the building to look for different types of plants, flowers, and trees using a checklist.
Teacher will bring items from home and have students sort them into paper, plastic, glass, or trash to establish how humans need things from nature to survive and must take care of the Earth.

Student explorations
Students will create a flower out of art materials and label the parts.
Students will plant seeds and observe and record the lifecycle. They will also learn how different seeds may have modified needs – i.e. water needs, light needs, etc.
Students will illustrate plant vocabulary in journals.
Students will research and create
Students will investigate insects and their characteristics and compare/contrast those with other insects.
Using recyclable goods, students will an object that is helpful to others, i.e. tablet holder, place setting, animal shelter, etc.
Investigate ocean animals and their characteristics.
Compare great white sharks to orca whales.
Sort plants and animals into groups based on physical characteristics: color, size, body covering, or leaf shape.

What opportunities will occur for transdisciplinary skills development and for the development

of the attributes of the learner profile?

Thinking Skills: Observational drawings of the butterfly and plant lifecycle.
Communication Skills: Reading a variety of sources for information about characteristics of living things and writing about discoveries.
Research Skills: Describing and recording observations by drawing and note-taking.
Learner Profile: Inquirers: They will develop their natural curiosity about living things and understand how they are dependent on each other. **Communicators:** They express ideas and information confidently and creatively. **Caring**: They show empathy and compassion for others when they take care of the planet

5. What resources need to be gathered?

What people, places, audio-visual materials, related literature, music, art, computer software, etc, will be available?

Books and posters about living things from the library:

Books: What is An Insect, The Very Hungry Caterpillar by Eric Carle, The Very Grouchy Ladybug by Eric Carle, I Love Bugs, Fireflies by Margaret Hall, Praying Mantises by Margaret Hall, Butterflies by Fran Howard

Website: www.unitedstreaming.com, www.brainpopjr.com, www.youtube.com

Field Trips – Butterfly Imax Museum

Butterfly larvae and a butterfly net to observe the lifecycle

Audubon Society- Insect Class Visit

myON book bundles

How will the classroom environment, local environment, and/or the community be used to facilitate the inquiry?

A wonder wall will be up in the classroom for students to ask questions. A classroom library with books on living things and recycling will be set up.

A butterfly garden is available on-site to allow students to observe metamorphosis.

Our plants will be set up in the classroom to observe.

Reflecting on the inquiry

6. To what extent did we achieve our purpose?

Assess the outcome of the inquiry by providing evidence of students' understanding of the central idea. The reflections of all teachers involved in the planning and teaching of the inquiry should be included.

There were many opportunities for students to engage in hands on learning by planting a mini garden in the classroom. Students were able to water their plants and record it in their journals daily.

***After Pandemic: (The Oil Ranch and the Butterfly museum were the most active places for student learning.)

How you could improve on the assessment task(s) so that you would have a more accurate picture of each student's understanding of the central idea.

We felt that our assessment tasks appropriately exhibited the content learned. Students had multiple opportunities to investigate how living things depend on one another and created art, writing pieces, researched plant growth and made observations, and illustrated findings. By incorporating many modalities, we were able to see growth in students through various media.

What was the evidence that connections were made between the central idea and the transdisciplinary theme?

The students were able to make connections between living and non-living and the interaction between animals and plants. Students also learned that all living things depend upon each other in various ways for survival. Students learned that most living things follow a cycle and that interruptions to that cycle can have effects in other areas – i.e. if humans don't take care of water sources, they won't have water for plants that provide oxygen. Additionally, (prior to the pandemic, the Oil Ranch and the Butterfly museum led to different inquiries about butterflies and their life cycle, farm animals and their life cycles, and the products we get from the farms.
The activity of growing butterfly larvae in the classroom meant that students were aware that living things have a life cycle.

7. To what extent did we include the elements of the PYP?
What were the learning experiences that enabled students to:

- develop an understanding of the concepts identified in "What do we want to learn?"

Function: Investigations into how different animals have life cycles. How do they grow and change? What kind of covering does it have? What is an insect?

Connection: Investigations into why we need to share the planet. At the field trip, what products does a cow give us? Make connections between how an animal grows and changes. How does the adult duck look compared to the baby duckling?

- demonstrate the learning and application of particular transdisciplinary skills?

Thinking: Experimenting with different seeds was very good for student's problem solving development. What will this seed grow into?
Research: They had to research what the seed would look like as a plant. Field trip to the Oil Ranch was good, enabling the students to explore animals and their life cycles.

- develop particular attributes of the learner profile and/or attitudes?

Inquirers: At the Oil Ranch and the Butterfly museum, students were able to follow their own inquiries and interests.

Reflective: Students reflected on the observations made watching the life cycle of a butterfly and the plants growing.

Communicators: Students were able to discuss their observations in an on-going way.

In each case, explain your selection.

Students developed a new sense of wonder about living organisms and were more attentive to insects, squirrels, birds, etc during play.
Students were more careful with plant materials in the classroom and at recess.
Students were more aware of recycling and made more efforts to conserve resources in the classroom – i.e. using scraps rather than asking for new pieces of paper.

Reflecting on the inquiry

8. What student-initiated inquiries arose from the learning?

Record a range of student-initiated inquiries and student questions and highlight any that were incorporated into the teaching and learning.

What happens when we run out of water?
Can you recycle everything?
Do animals all need the same things to survive?
What happens if it doesn't rain?

At this point teachers should go back to box 2 "What do we want to learn?" and highlight the teacher questions/provocations that were most effective in driving the inquiries.

Examples of student initiated inquiries:

- Some students brought in eggs and showed the class that these come from farm.
- Many students were interested in discussing the plants growing in their yards.
- Students hunted for butterflies at recess and discussed their life cycle.

What student-initiated actions arose from the learning?

Record student-initiated actions taken by individuals or groups showing their ability to reflect, to choose and to act.

- The students have been bringing in items to recycle.
- One class became interested in making sure all lights were turned off in the classroom when they left. They tried to find ways to conserve energy.
- Reading the Lorax became a big discussion point in how to take care of the planet.

9. Teacher notes

We will look into the Ozone theater presentation- contact Tiffany Pust and visit the local recycling center.
We will not go to the Butterfly Museum this year. Instead, we will look into classroom visits by The Audubon Society.
We felt that this planner really helped the children understand sharing the planet.