

## Inquiry Project Design Plan

<b>Teacher/Designer Names: Angela Petitti</b>	
<b>School: Martin Luther King Jr. Academy</b>	
<b>Name of Project: Endangered Animals</b>	<b>Grade Level: 3/4</b>
<b>Est Launch Date: Oct. 1, 2023</b>	<b>Est Duration (in weeks): 4</b>
<b>Disciplines Involved:</b>	
<b>Problem Statement:</b> More and more animals are becoming endangered.	

### STAGE 1: DESIRED RESULTS

<b>Big Idea: Endangered Animals</b>	
<b>Enduring Understandings:</b> <ul style="list-style-type: none"> <li>● Animals all over the world affect our daily lives</li> <li>● Our daily lives affect animals all over the world</li> <li>●</li> </ul>	<b>Essential Question(s):</b> <small>(MEANT TO BE SHARED WITH STUDENTS)</small> <ul style="list-style-type: none"> <li>● Why are animals endangered?</li> <li>● What is being done to help?</li> <li>● What can we do?</li> </ul>
<b>Established Goals (Standards, Performance Indicators, Learning Goals):</b> <small>*choose relevant standards to unit/project plan timing and learning goals; do not need to use all disciplines below.</small> <small>** unpack into SWK and SWBAT under identified standards as this will lead to aligned assessment design</small>	
<b>Science Standards</b> (list if using, unpack under each standard into SWK and SWBAT):  <u><b>5-LS2-1 Ecosystems: Interactions, Energy, and Dynamics</b></u>  <small>Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.</small>  <b>SWK:</b> <ul style="list-style-type: none"> <li>● Models represent the information we have learned</li> <li>● Plants, animals, decomposers all effect the environment</li> <li>●</li> </ul> <b>SWBAT:</b> <ul style="list-style-type: none"> <li>● Construct a representation of a digital model of an ecosystem</li> <li>● Describe how various parts of the ecosystem effect each other</li> <li>●</li> </ul>	
<b>Social Studies Standards</b> (list if using, unpack under each standard into SWK and SWBAT):  <b>SWK:</b> <ul style="list-style-type: none"> <li>●</li> <li>●</li> <li>●</li> </ul> <b>SWBAT:</b> <ul style="list-style-type: none"> <li>●</li> <li>●</li> <li>●</li> </ul>	
<b>Mathematics Standards</b> (list if using, unpack under each standard into SWK and SWBAT):	

Backward Stages: 1. Identify desired results. 2. Determine acceptable evidence. 3. Plan learning experiences and instruction.  
 Adapted from Wiggins & McTighe (2005) *Understanding by Design (UbD)*

Revised April 2021

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SWK:

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SWBAT:

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**ELA Standards** (list if using, unpack under each standard into SWK and SWBAT):

3R1: **Develop and answer** questions to **locate** relevant and specific details in a **text** to **support** an **answer or inference**.

SWK:

- Questions can be answered through research
- Relevant and specific topics should be used
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SWBAT:

- Ask and answer questions about endangered animals
- Use relevant information from at least 3 resources
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**Technology Standards:**

- **NYS Computer Science and Digital Fluency** (select at least 1 for Smart Start):
  - **ISTE: 1.4.a Design Process**
- ∉ Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.

**Social Justice Standards:**

**Other (Art, SEL, etc):**

**Links to Standards/Reference Frameworks:**

NYS NextGen [ELA](#) and [Math](#), [NGSS](#), [NGSS by DCI](#) [Nat'l C3 SS Framework](#), [NYS K-8 SS Standards](#), [ISTE](#), [Social Justice Standards](#), [CASEL SEL Framework](#), [NYS CS and Digital Fluency](#)

**Teaching/Learning Goal Notes for Stage 1:**

1. **Choose an endangered animal**
2. **Where does this animal live?**
3. **What does this animal eat?**
4. **When did this animal become endangered?**

### STAGE 2: EVIDENCE & ASSESSMENTS:

#### Performance Task Narrative

**Goal:** *Provide a statement of the task. Establish the goal, problem, challenge, or obstacle in the task.*

You are going to help solve problems and help endangered animals. You are going to find solutions to increase the animals population.

**Role:** *Define the role of the students in the task. State the job of the students for the task.*

You are going to be researchers to discover the causes behind endangered animals.

You are going to be environmental scientists to study the environment and its impact on animals.

You are going to be zoologists and study different endangered animals.

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**Audience:** *Identify the target audience within the context of the scenario.*

Students will target classmates, and the broader school community (students, teachers, administrators), as well as their families.

**Situation:** *Set the context of the scenario. Define the narrative.*

Students will analyze the ecosystem of an endangered animal and determine the causes of their endangerment.

**Product(s):** *Clarify what the students will create and why they will create it.*

- Using Thinglink, students will create a model of the ecosystem their animal lives in
- Can use audio and labeling for emerging language learners
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**Criteria for Success):** *Provide students with a clear picture of success. Identify specific standards for success such as rubrics, checklists, quizzes, etc.*

- Students will create a digital model of their ecosystem
- Students will have at least 5 facts about the endangered animal and ecosystem
- Students will describe the cause/effect relationships between their animal and ecosystem
- Students will explain why their animal is endangered
- Students will explain what is being done to help the animals and what they can do

**Other Evidence/Assessments:**

Create a Canva (infographic) including about endangered animal including habitat, ecosystem, food sources, shelter, how many are left in the world

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<b>STAGE 3: THE LEARNING PLAN:</b>
<b>Learning Activities</b>
(potential layout below. Can be daily, divided by periods, or even using the Engineering Design Process to divide into stages such as Ask, Imagine, Plan, Create, Improve)
<b>Week 1</b>
<b>Learning Goals: Understand and explain what an ecosystem is. What are the components of an ecosystem.</b>
<b>Learning Events: Students will watch a video about ecosystems. Students will also read an article about ecosystems to find basic information, and dig deeper into different kinds of ecosystems.</b>
<b>Formative Assessments: Students will list different ecosystems and their characteristics.</b>
<b>Notes/Resources:</b> CK12 Ecosystems Video - <a href="https://www.ck12.org/c/biology/ecosystems/lecture/what-is-an-ecosystem-4305593/">https://www.ck12.org/c/biology/ecosystems/lecture/what-is-an-ecosystem-4305593/</a> CK12 Ecosystems Article - <a href="https://www.ck12.org/c/biology/ecosystems/lesson/ecosystems-bio/">https://www.ck12.org/c/biology/ecosystems/lesson/ecosystems-bio/</a> Graphic Organizer to document information they have researched Canva
<b>Week 2</b>
<b>Learning Goals: What is an endangered animal? What characteristics make them be identified as endangered? Name some endangered animals.</b>
<b>Learning Events:</b> Show video of endangered animals. Show students various endangered animals. Students choose endangered animal. Start researching animal.
<b>Formative Assessments:</b> Create a Canva (Infograph) with basic information about animal. Name, habitat, ecosystem, food source (herbivore, omnivore, carnivore), how long they have been endangered,
<b>Notes/Resources:</b> Graphic Organizer to document information they have researched Canva
<b>Week 3</b>
<b>Learning Goals:</b> Begin putting research and information into Thinglink Constructing 3 sentences were point on picture Incorporate links with additional information/ videos

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<b>Learning Events:</b> Show example Thinglink
<b>Formative Assessments:</b>
<b>Notes/Resources:</b>
<b>Week 4</b>
<b>Learning Goals:</b> Presentation
<b>Learning Events:</b>
<b>Formative Assessments:</b>