



## Integrating Role-Play with Science Investigation

With grades K-2

**DESCRIPTION:** In this sample lesson and video series, HTY teaching artists demonstrate how teachers can implement simple role-play and drama strategies to guide students to creatively engage with science content.

An 'expert scientist' (teacher-in-role) guides a team of scientists (students-in-role) to conduct an investigation of how plants/animals adapt to their environment and depend on each other to survive. Students also imagine themselves as the animals or plants to gain insight into how they live and survive in their environment.

**PURPOSE:** *"... treating children as responsible experts increases their engagement and confidence. They can perceive a real purpose for learning and discovering together in an interactive and proactive way – gathering skills and knowledge they can apply to their everyday lives. [...]*  
*Being treated as experts empowers pupils to actively explore issues across the curriculum, assume responsible roles, solve problems and make decisions in guiding the process and its outcomes. "* - <https://dramaresource.com/dorothy-heathcote-pioneer-of-educational-drama/>

### **STANDARDS CONNECTIONS:**

#### **Next Generation Science Standards**

K-ESS3-1 Earth and Human Activity

Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.

1. Structure, Function, and Information Processing

1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

2. Interdependent Relationships in Ecosystems

2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.

#### **National Core Arts Standards: Theatre**

Anchor Standard 1: Generate and conceptualize artistic ideas and work

TH: Cr1.1.K

a. With prompting and support, invent and inhabit an imaginary elsewhere in dramatic play or a guided drama experience (e.g., process drama, story drama, creative drama).

TH: Cr1.1.1

c. Identify ways in which gestures and movement may be used to create or retell a story in guided drama experiences (e.g., process drama, story drama, creative drama)

TH: Cr1.1.2.

c. Identify ways in which voice and sounds may be used to create or retell a story in guided drama experiences (e.g., process drama, story drama, creative drama).

# Sample Lesson OUTLINE & Instruction EXAMPLES

STEPS	ACTIVITY	ANIMAL FOCUS	PLANT FOCUS	
1	<p><b>Introduction to Lesson</b> Teacher introduces the lesson and 'Expert Scientist' who will visit the class.</p>			
2	<p><b>Step into Role</b> Teacher 'transforms' into the role of 'Expert Scientist,' to outline the task and purpose and guide students into role as the science team to prepare for their investigative journey.</p>			
3	<p><b>Dramatize the Science Information</b> Out of role, teacher guides students to dramatize the animals/plants and explore the unique ways the animals/plants survive in their environments.</p>	<p><b>Still Image (Snapshot / Pair Snapshot)</b> Teacher guides students to create frozen images of the animals/plants.</p>		
	<p><b>Action (Pantomime / Pair Pantomime)</b> Teacher guides students to create unique action of the animals/plants and their survival techniques.</p>			
	<p><b>Action (Narrated Pantomime)</b> Teacher reads a text passage about the animal as students create the action sequence.</p>		N/A	
4	<p><b>Reflect in Role</b> Teacher 'transforms' back into the 'Expert Scientist' role to guide the student/scientists to reflect on what they discovered and learned during their investigative journey.</p>			