

Project Performance Science:

an exploration of local ecology and the performance arts!

Overview

In Biology/Environmental Science class, students will spend 12 weeks conducting ecology field research using observations and iNaturalist (www.inaturalist.org/) to better understand interactions between organisms and their environment. In Humanities, students will actively learn through movement and performance. Combining our research and performance, we have been invited to the Living Coast Discovery Center (LCDC, <http://www.thelivingcoast.org/>) to use their exhibits as backdrops for our *Performance Science* pieces to celebrate and share our learning!

Essential questions

1. How does local field research promote ecological and environmental stewardship?
2. What are the interactions that take place between organisms (biotic factors), these organisms and their environment (abiotic factors), and these organisms and people?
3. How can we communicate scientific research findings beyond peer-reviewed journal articles in order to capture a wider audience?

Weekly Routines

- **Mondays** – Weekly Personal Reflection (WPR) share out, in-class ecology reading, and field research preparation.
- **Tuesdays** – Field research (one pod at a time, switch time of day each week).
- **Wednesdays** – Field research (whole team, 8:30am-11:25am).
- **Thursdays** – iNaturalist data entry/analysis and final performance preparation.
- **Fridays** – WPR to take home and present to parents/guardians, iNaturalist data entry/analysis, and final performance preparation.

Curriculum Topics

- Ecology
- Taxonomy

Final products

Performances at the Living Coast Discovery Center (LCDC)! Students will study and choose an ecological interaction of interest (e.g. wind and cacti) and create a performance (e.g. poetry, spoken word, song, dance, art, play, etc.) to communicate their research findings. Students will also choose a setting for their performance at the LCDC that they feel will enhance their audiences understanding of their interaction of interest. For example, a student who researched wind and cacti may choose to do their performance within the *Native Plant Gardens* of the LCDC.

Due Date	Project Benchmarks
9/4/15	Identify using iNaturalist: <input type="checkbox"/> 1st Unique Plant (Scientific Name: _____) <input type="checkbox"/> 1st Unique Animal (Scientific Name: _____)
9/11/15	Identify using iNaturalist: <input type="checkbox"/> 2nd Unique Plant (Scientific Name: _____) <input type="checkbox"/> 2nd Unique Animal (Scientific Name: _____)
9/18/15	Identify using iNaturalist: <input type="checkbox"/> 3rd Unique Plant (Scientific Name: _____) <input type="checkbox"/> 3rd Unique Animal (Scientific Name: _____)
9/25/15	Identify using iNaturalist: <input type="checkbox"/> 4th Unique Plant (Scientific Name: _____) <input type="checkbox"/> 4th Unique Animal (Scientific Name: _____)
10/2/15	Identify using iNaturalist: <input type="checkbox"/> 5th Unique Plant (Scientific Name: _____) <input type="checkbox"/> 5th Unique Animal (Scientific Name: _____)
10/8/15	Identify using iNaturalist: <input type="checkbox"/> 6th Unique Plant (Scientific Name: _____) <input type="checkbox"/> 6th Unique Animal (Scientific Name: _____) Interactions: <input type="checkbox"/> Three observed interactions of interest
10/23/15	Living Coast Discovery Center field trip #1 (10/20/15) Identify using iNaturalist: <input type="checkbox"/> 7th Unique Plant (Scientific Name: _____) <input type="checkbox"/> 7th Unique Animal (Scientific Name: _____)
10/30/15	Identify using iNaturalist: <input type="checkbox"/> 8th Unique Plant (Scientific Name: _____) <input type="checkbox"/> 8th Unique Animal (Scientific Name: _____) Interactions: <input type="checkbox"/> Number one interaction of interest
11/6/15	Field research days are dedicated to observing/recording your interaction of interest
11/13/15	Identify using iNaturalist: <input type="checkbox"/> 9th Unique Plant (Scientific Name: _____) <input type="checkbox"/> 9th Unique Animal (Scientific Name: _____)
11/18/15	Field research days are dedicated to observing/recording your interaction of interest LCDC field trip #2 (11/19/15 - choose performance locations)
12/4/15	Identify using iNaturalist: <input type="checkbox"/> 10th Unique Plant (Scientific Name: _____) <input type="checkbox"/> 10th Unique Animal (Scientific Name: _____)
12/10/15	LCDC field trip #3 (rehearsal)
Saturday 12/12/15	<i>Performance Science</i> Exhibition at the LCDC!!!

